



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
INS11012

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
SHELLY MURRAY
304-558-8801

RFQ COPY
 TYPE NAME/ADDRESS HERE

COUNTRY

Milliman, Inc.
 1550 Liberty Ridge Drive
 Suite 200
 Wayne, PA 19087

SHIP TO

INSURANCE COMMISSION
 1124 SMITH STREET
 CHARLESTON, WV
 25305-0540 304-558-3707

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
04/20/2011				

BID OPENING DATE: **05/04/2011** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
----- ADDENDUM NO. 1 -----						
THIS ADDENDUM IS ISSUED TO ADDRESS THE QUESTIONS RECEIVED PRIOR TO THE QUESTION SUBMISSION DEADLINE OF 04/11/2011.						
BID OPENING DATE IS EXTENDED:						
FROM: 04/27/2011						
TO : 05/04/2011						
0001	1	LS	220-34	REQUEST FOR INFORMATION		
				EXHIBIT 10		
				REQUISITION NO.: INS11012		
ADDENDUM ACKNOWLEDGEMENT						
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						
ADDENDUM NO. 'S:						

RECEIVED
 2011 MAY -4 PM 12:34
 WV PURCHASING DIVISION

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE: *John P. Bond* TELEPHONE: **010-970-8090** DATE: **5/3/11**

TITLE: **Principal Consulting Actuary** REF: **91-0075-041** ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
5. Payment may only be made after the delivery and acceptance of goods or services.
6. Interest may be paid for late payment in accordance with the *West Virginia Code*.
7. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.htm and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.
15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



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 Department of Administration
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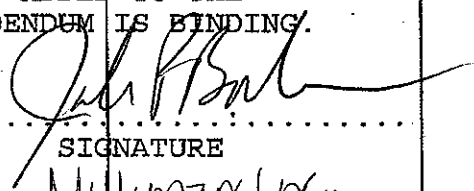
Milliman, Inc.
 1550 Liberty Ridge Drive
 Suite 200
 Wayne, PA 19087

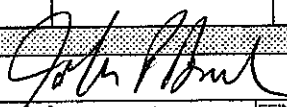
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LINE	QUANTITY	UQP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
NO. 1				
NO. 2				
NO. 3				
NO. 4				
NO. 5				
<p>I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.</p> <p>VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.</p> <p style="text-align: right;">  SIGNATURE Milliman, Inc. COMPANY 5/3/11 DATE </p> <p>NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID.</p> <p>----- END OF ADDENDUM NO. 1 -----</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE 	TELEPHONE 410-975-8093	DATE 5/3/11	
TITLE Principal Computing	FEN 91-0075-041	ADDRESS CHANGES TO BE NOTED ABOVE	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFI # INS11012**Addendum #1**

1. Page 3, Section 1.1 - In the event the State elects to proceed with a solicitation based on the RFI responses; would only those respondents to the RFI be eligible for subsequent solicitations?

Answer: No. However, submissions will be used in crafting subsequent solicitations for baseline research.

2. Page 4, Section 1.4 - Are there any current reports or papers (e.g., results/findings) available to prospective RFI respondents in advance of the RFI response submission deadline? If so, where can the information be found?

Answer: The OIC has made available to the public a number of Exchange research documents. These documents can be found at <http://www.wvinsurance.gov/healthcareexchange/HealthCareExchange.aspx>
x

3. Page 5, Section 1.4.2 - Are there any current reports or papers (e.g., results/findings) available to prospective RFI respondents in advance of the RFI response submission deadline? If so, where can the information be found?

Answer:
<http://www.wvinsurance.gov/healthcareexchange/HealthCareExchange.aspx>
x

4. Does the RFQ require a detailed response to all the questions in sections 1.4.3 and 1.4.4? Or are those questions more of sample of issues that will need to be addressed in a future RFP and are being shown here for informational purposes?

Answer: This is a Request for Information or RFI, not a Request for Quotation or RFQ. Section 1.4.3 and 1.4.4 are areas that need to be addressed in determining how best to fulfill the new Patent Protection and Affordable Care Act requirements. These questions represent the current issues identified for further research and we ask that vendors respond to all questions if possible.

5. The RFQ is a little sketchy as to its purpose. Can you be a bit more explicit regarding the goals of this RFQ?

Answer: This is a Request for Information or RFI, not a Request for Quotation or RFQ. The purpose of this Request for Information (RFI) is to determine the focus, structure, and content of future baseline research procurements.

6. Will the State be facilitating face-to-face meetings with potential vendors prior to releasing an RFP? There would be beneficial one on one communication regarding the solution capabilities that cannot be conveyed in an RFI response.

Answer: This is not envisioned at this time. Vendors should attempt to convey strategies for baseline research methods/solutions that are both reflected and not reflected in this RFI.

7. Will the responding vendors be able to mark certain areas of the RFI response confidential?

Answer: All documents submitted to the State Purchasing Division related to purchase orders or contracts are considered public records. All bids, proposals, or offers submitted by Vendors shall become public information and are available for inspection during normal official business hours in the Purchasing Division Records and Distribution center after the bid opening. However, the only exemptions to disclosure of information are listed in *West Virginia Code §29B-1-4*. Any information considered a trade secret must be separated from the Vendor submission and clearly labeled as such. Primarily, only trade secrets, as submitted by a bidder, are exempt from public disclosure. The submission of any information to the State by a Vendor puts the risk of disclosure on the Vendor. The State does not guarantee non-disclosure of any information to the public.

8. Will this RFI response and the subsequent RFP response preclude the responding vendors from any other future work with the State?

Answer: No. RFI respondents are encouraged to apply for future baseline research procurements.

9. Is the State considering allowing Medicaid eligible residents to enroll through the Exchange?

Answer: No option is being ruled out at this time.

10. Is Exchange governance to be addressed as part of this project?

Answer: West Virginia's Exchange governance was outlined in State Code via SB 408, which passed on March 12, 2011.

11. Does the scope of the project include the role of the producer (broker) in the Exchange?

Answer: Yes. Researching the role of the insurance producer is a fundamental research component of this project.

12. Is there or will there be data available as to numbers of insured, uninsured or underinsured individuals or small groups at some point, such as 12-31-2010?

Answer: As part of future baseline research procurements, basic market research data as those listed in this question need to be answered. Where data already exists on basic market research questions, the information needs to be evaluated and verified where appropriate.

13. Does the state have data available as to income distributions of residents versus the various percents of the FPL?

Answer: Use the best and most relevant data available from the best and most relevant resources with justification regarding your findings in relation to the data and resources selected.

14. Does the state have data available as to levels and types of insurance coverage for small employers?

Answer: Same as #13.

15. Will the state provide data as to residents covered under Medicaid, Medicare and public sector or public employee plans? For the public sector, what is the level of coverage? Are other public entities covered with the state employee plan?

Answer: Such data does exist. All baseline research information needs to be evaluated and where appropriate, verified.

16. Is data available for the state as to distribution of physicians and hospitals by state regions on a per capita basis?

Answer: Such data exists in various forms but all baseline research information needs to be evaluated and where appropriate, verified.

17. How many health insurance companies, HMOs currently operate within the state? What is the enrollment for each company?

Answer: Same as #13

18. Does the state have data available as to number of employers who are self insured in the state? By region? By group size?

Answer: Same as #13.

MILLIMAN'S RESPONSE TO

REQUEST FOR INFORMATION INS11012

Actuarial and Economic Modeling of West Virginia's Health Insurance Exchange

PREPARED FOR:

THE WEST VIRGINIA OFFICE OF THE INSURANCE COMMISSION



Submitted: May 4th, 2011

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INTRODUCTION

UNDERSTANDING OF RFI

West Virginia's Request for Information (RFI) asks for an expert evaluation of the State's understanding of the process for the development of a state health exchange. It also seeks examples of best practice regarding the approach to such a project. Milliman is an established expert in the field of health insurance and has extensive experience with the development of complex systems like an Exchange. The firm is pleased to offer this response to the State while it considers next steps in the process.

ABOUT MILLIMAN

Milliman provides consulting services for several states regarding Exchanges. Healthcare reform is literally our business, and we've invested time and money to build tools that drive sophisticated analysis of complex systems as they change in response to reform. The firm's multidisciplinary team boasts a broad experience base. The diversity of our experience is mirrored in the diversity of our client base, which includes state governments, Medicaid departments, providers, insurers, unions, self-funded employers, and Federal organizations such as the Veterans Administration and the Congressional Budget Office.

Milliman approaches the evaluation requested by West Virginia with the following three core strengths:

1. *Consultants.* Milliman employs actuaries, IT professionals, administration experts, economists, statisticians, and clinicians. Our broad array of professionals allows us to evaluate Exchanges from the perspective of many stakeholders. Milliman also offers a depth of expertise in risk adjustment with skilled professionals and tools like the Milliman Advanced Risk Adjusters (MARA), a suite of risk adjustment tools developed for population analysis.
2. *Work.* Our work varies from the very narrow, such as pricing new benefits for an insurer's health plan portfolio, to global macro-modeling exercises, such as estimating the impact of establishing a single-payer system for a given state.
3. *Clients.* Milliman's clients cross the entire spectrum of institutional stakeholders in the healthcare system, including state and federal government health systems, employers, health insurers, union trusts, providers, equipment manufacturers, drug manufacturers, Medicaid, Medicare Part C and Part D, and other governmental entities around the world. We have

recently assisted the States of Washington, North Carolina and Indiana as they develop their Health Exchanges.

As a private firm owned by active principals, Milliman offers a completely objective analysis, not advocacy. Milliman is not owned by an insurance company or any other healthcare system stakeholder. This independence provides us with the ability to be completely objective.

Finally, Milliman is unparalleled in health research spending related to healthcare reform and the Patient Protection and Affordable Care Act (ACA). Annually we spend more than five million dollars on health actuarial research and data. In the past few years, we have spent several million dollars developing a model that we are now using to project the impacts of healthcare reform. The Healthcare Reform Financing Model (HCRFM) includes a high degree of detail, including population by income, current health status, insurance (if any), and approximate costs and cost variation with each market. For more on this model, see *Appendix I*.

CONTACT INFORMATION

As requested in the RFI, following you will find Milliman's contact information for this response.

<i>Company Name</i>	Milliman, Inc.
<i>Address</i>	1550 Liberty Ridge Drive, Suite 200 Wayne, PA 19087-5572
<i>Primary Point of Contact</i>	Jack Burke, Principal and Consulting Actuary
<i>Telephone Number</i>	610.975.8093
<i>Email Address</i>	jack.burke@milliman.com

COMMENTS

Milliman understands that the State of West Virginia's primary goal in issuing its RFI is to gather expert advice and examples of best practice approaches to the development and implementation of the ACA-required state health insurance Exchange. Specifically, the State is seeking information about the type and extent of services required. This section briefly explains Milliman's understanding of West Virginia's current situation with respect to the Exchange. We will spend some time discussing typically required Exchange features. In addition, this section will also provide Milliman's evaluation of the State's current understanding of the Exchange project as outlined in the RFI. Throughout this section, the firm highlights some touchstones for the State further to consider when evaluating its next steps.

As you will see, Milliman strongly recommends that the State pursue professional actuarial consulting services for the planning and implementation of the Exchange. Threaded throughout this section, we have highlighted the areas of complexity that require the attention of subject matter experts, as well as those areas in which we already have a depth of understanding providing the potential for value-added services to the State should West Virginia ultimately pursue consulting services. The State is also encouraged to move quickly to issue a request for proposal to ensure timely resolution of the issues raised by the implementation of an Exchange.

CURRENT SITUATION

As a result of West Virginia's participation in the State Health Access Program (SHAP) grant issued in 2009, the State has made some progress with conceptual plans for the Exchange. The State has also gathered at least some of the required data to evaluate system needs. The State's awarding of the Planning Exchange Grant (PEG) has made available funds in the amount of \$1M for the design and implementation of the Exchange. The State's goal is to beta test the system by July 2012 with full implementation no later than 2013, as required by ACA. While it is clear the State has made some headway with conceptual design and gathering of the required data, Milliman believes that the complexity of the Exchange program will require that the State use its PEG funds to secure professional consulting services.

There are many typical required features of the Exchange that are critical to the State's consideration of whether or not to undertake development and implementation of the Exchange on its own. Things to consider include:

- **A fluid insurance market.** The ACA requires that states address both individual and small group purchasing within its Exchange. Presently, West Virginia has limited experience with an

insurance Exchange outside of the Medicaid arena. It will be critical for West Virginia to develop additional knowledge of what ACA means for the individual and small group insurance markets, how these markets will interact with the Exchange, and the further complexities introduced by interactions between the reformed market and the expanded Medicaid market that will also be created by ACA.

- **Interaction between the Exchange and Medicaid expansion.** There will continue to be movement of individuals between the Exchange marketplace and Medicaid as incomes increase or decrease. This movement is in addition to existing enrollment dynamics, where people opt in and out of insurance coverage. All of these movements will now have tax implications, requiring integration with IRS systems. These population movements are accompanied by related selection and IT challenges.
- **Creation of a Basic Health Program.** Furthermore, the above issues need to be analyzed and evaluated in the context of the Basic Health Program option. To adequately address the role of the Basic Health Program option in West Virginia, one must understand the Medicaid market, provider networks, costs of care, and health status of its covered lives, and must then compare and contrast that with the commercial insurance provider networks, costs of care, and health status of *that* marketplace. Disconnects will occur as people continually migrate between and among the various delivery and financing mechanisms. A solution must be structured to make this work with the least amount of disruption, while, at the same time, at a cost that persons can afford and that does not affect the state budget.
- **Ongoing need for cost containment.** Identifying areas for cost efficiencies remains a persistent and lasting focus of healthcare delivery. Economic rules state that, when a system is operating at its “production boundary” (or maximum capacity), it would not be possible to improve quality without incurring higher cost. In reality, no system is operating at maximum capacity. It is possible to have higher quality without incurring more cost to the system, if waste and inefficiencies can be identified and addressed adequately. And that is the difficult part—the trick is to identify and address these issues adequately.
- **Quality challenges.** There are also issues related to the quality of healthcare. The Exchange, under the ACA, will be required to collect information on quality measures. Additionally, it needs to employ risk adjustment models and members’ claims data. Milliman’s large industry store of detailed claim data (the Health Cost Guidelines), for example, would allow the Exchange to benchmark program efficiency at multiple levels were the firm engaged to provide services under an Exchange planning and implementation project.

- **Contingency planning.** With so many moving parts introduced by the ACA, there are many possible contingencies that may require advanced planning. For example, how does the State plan to deal with discrepancies between projected enrollment figures and the realities of enrollment? Such an outcome will have various financial implications for the many parties involved in operation of the Exchange. This is one of potentially hundreds of contingency questions that may require some advanced consideration as the strategic plan is implemented.
- **Next-generation risk adjustment planning.** With risk adjustment becoming a more profound aspect of the American healthcare system under the ACA, Milliman's expertise as a world leader in the topic of risk adjustment, consulting with governments across Europe and in other developed healthcare economies, can be used to help the State ask the right kinds of questions. For example, under the ACA, the Exchange will be required to collect information on quality measures, which has implications for risk adjustment: Is the exchange allowed to tie the premium or the risk transfer to quality? Can risk adjustment, and perhaps reinsurance and risk corridors, also be tied to quality in the back end, such that health plans have enough incentive to offer better quality products without costing consumers a lot more? Or, in addition to risk adjustment, are there other back-end risk equalization mechanisms that may help protect the health plans? The introduction of these quality considerations to what is already a sophisticated risk adjustment infrastructure will be an important aspect of the State's strategic planning.

EVALUATION OF WEST VIRGINIA'S UNDERSTANDING OF THE PROJECT

Per RFI Addendum 1, the State requests answers, if possible, to each of the questions presented in *Section 1.4.4: Actuarial Services and Economic Modeling*. Answering all of the questions presented is not possible in such a constrained space; however, we can provide additional insight into whether these are the right questions to be asking and what additional considerations the State should review. In order to address this evaluation most effectively, we have broken the issues presented in *Section 1.4.4* into five groups for discussion: (1) Technical Estimates; (2) Actuarial Modeling for the Design, Planning and Analysis of Technical Scenarios; (3) Actuarial Modeling of Exchange Financial Sustainability; (4) Actuarial Modeling of Barriers, and (5) Opportunities.

Technical Estimates

In its answer to Question 12 of the RFI Addendum, the State demonstrated it understands that the first step for the transition to a state-run health insurance Exchange is the gathering of basic market research data; then evaluating the gathered and existing data.

The Exchange is a complex system with many moving parts. In order to ensure that all of these parts continue to function in top form, the system must be evaluated accurately and thoroughly. We suggest using the following general process:

- Identify source data and key benchmarks for evaluating alternatives (e.g., un-insured, under-insured, small group, etc.), through the following resource channels:
 - Existing research (e.g., Kaiser Family Foundation)
 - Publicly Available data (e.g., MEPs, annual statements)
 - Proprietary Data (e.g., Milliman research)
 - Ad hoc surveys (e.g., insurers)
- Create a status quo model of the West Virginia healthcare system
 - Populate and calibrate Milliman models to the State's situation
- Model Exchange scenarios
 - Definition of market or reform scenarios (e.g., combine individual and small group Exchanges?)
 - Establishing key assumptions and interdependencies
 - Processing model changes
- Develop plan for financial sustainability
- Develop and refine conclusions

Actuarial Modeling for the Design, Planning, and Analysis of Technical Scenario

The State must decide whether the Exchange will be the required market for individual and small group purchasers or an option in addition to non-Exchange products. Several key details would influence this decision, such as the following:

- Open enrollment policies will impact the movement between the Exchange and the non-Exchange market. Tighter open enrollment periods can help reduce potential adverse selection by limiting the control individual consumers would have regarding when to seek coverage in the Exchange.
- The State's approach to selecting insurer participants for the Exchange must also be considered. More selective criteria, such as competitive bidding, will limit the choices in the Exchange while accepting all insurers meeting qualification requirements will likely provide more choices. If consumers view the Exchange choices as too limiting, they may look for alternatives in the non-Exchange market.

- The availability of self-insured arrangements outside the Exchange may also influence this decision. Self-insured arrangements, particularly if available to small group purchasers, may impact the relative risk of the population seeking insurance from the Exchange.

Actuarial Modeling of Exchange Financial Sustainability

The actuarial modeling of financial sustainability should allow the testing of various alternative assumptions and participant take-up rates. The process should start with the identification of the major functions required to support the operations of the Exchange. The next step is creating a model that, for each function, develops the drivers of cost and value of each driver. By populating the model with the expected units that drive each function (e.g., number of enrolled members, numbers of phone calls, contracts to be billed), the total costs for operating the Exchange can be estimated.

We suggest that the model also recognize revenue sources so that the State can determine the extent to which the Exchange can be financially self-sufficient starting in 2015. The primary revenue source will be a component of the premium revenues into the Exchange. Other sources may include investment income on any invested assets along with revenues from penalties from persons not complying with the coverage mandate, etc.

We also consider it important to provide the type of carrier interaction that allows them to reduce administrative costs, thereby avoiding doubling up of administrative expense. We have worked for carriers in developing the ideal transaction methodologies, such that a clean separation of duties occurs and are not redundant.

We must also analyze resources available to the State for the development, implementation and continuing oversight of the system in order to lay the groundwork with a business operations process for this effort. Ultimately, a competitive Exchange will ensure the volume needed to remain self-sustaining, and we can help identify the key areas of competition.

Actuarial Modeling of Barriers

This section will explore two key barriers that must be addressed when modeling an Exchange. There are many other barriers that must be modeled as well, but the following should give the State an idea of the level of effort to expect.

Risk Adjustment

Risk adjustment is an important tool to level the playing field for risk-bearing organizations, mitigate adverse selection, and encourage market participation and fairer competition. Inadequate risk

adjustment and inappropriate uses may lead to unintended consequences. As such, Milliman believes that the development and implementation of risk adjustment models in a healthcare reform environment should be guided by the following principles:

- Condition categories should be clinically meaningful and reasonably specific in order to minimize opportunities for gaming or discretionary coding.
- Diagnoses within the same condition category should be reasonably homogeneous with respect to healthcare cost and utilization, in order to ensure reasonable predictive accuracy and robustness of the model.
- Condition categories should have adequate sample sizes to permit accuracy and stability of model predictions. This is primarily a statistical consideration. Consistent with this principle, relatively rare diseases are classified together with more prevalent diseases that have similar costs, even if they may have distinct treatment patterns.
- Hierarchies should be imposed to characterize an individual's health status within each disease process. While the effects of unrelated disease processes accumulate, related conditions should be treated hierarchically with only the most severe manifestation of a condition used.
- Model design should encourage specific coding and discourage vague coding.
- A risk adjustment model should not reward coding proliferation.
- Providers should not be penalized for recording additional diagnoses.
- The mapping of diagnosis codes should be exhaustive. As of October 1, 2010, there are about 14,400 codes in the current ICD-9-CM code set. New diagnosis codes are published by the Centers for Disease Control and Prevention (CDC) every year, a result of the most updated clinical research. It is important for risk adjustment models to recognize the new codes as they come along.
- Discretionary conditions should be excluded from the risk adjustment model. Consistent with this principle, vague and nonspecific diagnoses are excluded.

Milliman is a leader in the development and analysis of risk adjusters. In an exchange environment, Milliman believes the risk adjuster should be transparent to all parties to increase the credibility, objectivity, and understanding of the process.

Adverse Selection

Controlling adverse selection will be critical to the long-term viability of the Exchange. Adverse selection could occur between the Exchange and the non-Exchange markets, and possibly among carriers within the Exchange. We will discuss structural options for the Exchange and risk adjustment that can help mitigate adverse selection opportunities.

The Exchange will be most likely to influence the quality and delivery of healthcare in West Virginia if it is a meaningful competitor to the non-Exchange market and a significant portion of the state's residents get their insurance through the Exchange. If the Exchange is not viewed as being competitive, plans operating outside the Exchange will be less affected by the competition and quality improvement activities inside the Exchange.

Adverse selection will likely occur, as the healthiest people will tend to elect benefit plans with leaner benefits while the least healthy people will tend to elect plans with richer benefits. For example, this commonly happens in employer benefit plans when employees have the option to choose among multiple plans, such as a high deductible plan and a low deductible plan. The adverse selection can be reduced somewhat using implicit subsidies in the employee contribution rates, by coupling richer benefits with narrower provider networks, or other methods. Similar methods could be implemented in the Exchange, although the mechanics could be more complicated due to the presence of multiple insurance companies and the individual orientation of the Exchange.

Adverse selection can be monitored using methods that are relatively simple or more sophisticated depending on the needs of the system. Risk adjustment helps, but does not eliminate the anti-selection risk. For example, a simple way is to compare PMPM (per member per month) benefit costs among the benefit plans, after adjusting for differences in the mix of members by geographic area, age and gender, and other common rating variables. The State could easily do this using a rating tool like the Milliman's Health Cost Guidelines® (HCGs). The HCGs would also allow for adjustment due to induced utilization, which is utilization differences that we would expect among the benefit plans due solely to differences in the richness of the benefits (i.e., when people have leaner benefits, they use less healthcare). Additional sophistication could be introduced by adjusting the historical benefit costs for differences in the average risk score of the enrollees in each plan. Risk scores could be calculated using actual medical claims and /or prescription drug claims, and commercially available risk adjustor software. The firm would discuss these various monitoring methods, and their relative pros and cons in greater detail in a final report.

APPROACH

Milliman believes that the best practice approach for states implementing health insurance Exchange programs is a holistic one. In order for a complex system like an Exchange to function in the long term and remain financially sustainable, states must recognize the need to develop several pieces of the system at the same time. Milliman's depth of subject matter experts, from actuaries to information technology specialist to economists, has given us the opportunity to analyze, evaluate and develop just such complex systems as whole entities rather than composite parts. Below you will find a brief discussion of Milliman's approach to projects of this scale.

GATHER GOALS

The first step in the development of a useable business operations plan that will lay the foundation for a successful implementation is a clear assessment of the State's goals for the Exchange. All of the work associated with this effort must be grounded in these goals and objectives. To the extent they have not yet been completely articulated, Milliman would collaborate with the State in evaluating the issues and in assisting the state in setting those goals. Below we have provided a list of what we call the "Top 10 Actuarial Concerns" related to Exchange development. The list is not specific to West Virginia, but we wanted to include the entire list here as it may be a helpful guide in the State's planning process. Until we delve into West Virginia's unique challenges, we cannot be more specific.

We would recommend that we first review this list in order to understand West Virginia's perspective with respect to each of these items and assist the State in clarifying its objectives where they are not yet set. The result of this step will be a clear set of goals and objectives for the State's Exchange that will serve as the foundation for the remainder of the work under.

Health Benefit Exchange – Top 10 Actuarial Concerns

As states think about developing health exchanges, it is clear that a "one size fits all" approach will not work. Each state has different types of insurers and providers and varying governmental views. Below are the top ten actuarial issues that West Virginia should consider when forming its Exchange.

1. Mandatory or voluntary

This decision, more than any other, will determine whether the Exchanges will be "mainstream" (i.e., the dominant "aggregator" in the private health insurance market) or limited to being the

source for public coverage for the low-income population. It is the most significant decision a state can make to determine the breadth of their Exchange.

An analysis of Medicaid expansion that Milliman performed for Indiana showed that uninsured individuals (those who will be attracted to the Exchange) have higher morbidity than the currently insured population and that uninsureds demonstrate pent-up demand when coverage is made available to them.¹ If voluntary, the Exchange may attract a disproportionate share of individuals that are less healthy than the average population. Risk adjusters will transfer this risk to some degree, but there is no such thing as a perfect risk adjuster. Most of them under-predict high-cost claimants and over-predict low-cost claimants. A good actuary can set up additional adjustments to partially offset this bias.

On the other hand, voluntary Exchanges allow for other insurers to continue offering services (e.g., small employer trusts that have earned their members' trust over a number of years), and options that enable continuous improvement, as well as improved employer choice. In addition, since self-insurance is an employer option, eliminating the non-Exchange insurance market does not eliminate the selection dynamic.

2. To merge or not to merge

Do individuals belong in the same risk pool as small group? This is the second most important factor in whether an Exchange becomes mainstream or the source for public coverage. Individuals with health conditions will have access to much better rates when merged with the small group market because the large number of small group members will provide stability to the combined market rate. Assuming the two markets are separated, the individual market may have higher rates. In this situation, many individuals will likely pay the penalty and purchase coverage only if they need it during the following year's open enrollment. Some might point out that merging the two markets may create a hidden tax on small employers. This could be true. However, it will likely result in decreasing the number of uninsureds by attracting more individuals into the insurance pool that would, in the absence of pooling the two markets, remain uninsured and pay the penalty. Over time, however, the increased cost to the small employer market may encourage employers to avoid the Exchange. Merging risks pools is usually not a good long term solution.

¹ Damler, Robert. "Experience under the Healthy Indiana Plan: The short-term cost challenges of expanding coverage to the uninsured," August 26 2009. Available at <http://publications.milliman.com/research/health-rr/pdfs/experience-under-healthy-indiana.pdf>

3. Implementation of risk adjusters and risk sharing

This is a matter of creating the perfect umpires. Insurers are worried about the lack of ability to assess an applicant's medical conditions prior to insuring them, which goes into effect after January 1, 2014. The ACA's solution to limit a carrier's risk due to a lack of underwriting is to adjust each insurer's premium based on the health status of the individuals they insure through risk adjusters. Unfortunately, as mentioned earlier, risk adjusters are not perfect crystal balls. Risk adjusters are good tools, but setting up a fair risk adjustment system is complex. It involves "fitting" the model to the State's specific population and making continual adjustments as results are monitored.

ACA's second solution to limit a carrier's risk due to a lack of underwriting is to implement a risk sharing arrangement between a given carrier and the government, similar to Medicare Part D. Risk sharing is based on the variation of results relative to a target loss ratio. This mechanism appears to be a popular government approach to convincing insurers to participate in this market by limiting their risk in the early years. We have extensive experience working with the Part D reinsurance program and both Medicare risk adjustment mechanisms (Part C and Part D).

4. Creativity

Does West Virginia want to emulate Massachusetts or Utah? It is important to look to these states and others for plans and ideas. However, many existing Exchanges were established in different regulatory environments for specific purposes. Given the new environment and regulations, states need to be creative and design an Exchange that specifically meets their needs. Differences among states include the level to which the various Departments of Insurance exercise their authority, the amount of information a state requires carriers to post on their Exchange (including rates and quality indicators), and many other factors. Exchanges should look into capitalizing on these state-specific information sources to build a high-quality, efficient Exchange.

5. Joining forces

Should states consider forming joint Exchanges with other states? There are advantages and disadvantages to this. After all, if it was easy, the federal government would have simply made one Exchange. One of the reasons they didn't is because of authority. Most states wanted to control their own insurance destiny. Many states are struggling with forming their own Exchanges given the various perspectives. Joining forces with another state may well be to their mutual benefit. On the other hand, adding another state to the decision-making process could result in gridlock. The final law seems to say, "If it makes sense, the states will naturally find a way to work together."

6. *The large group factor*

Starting in 2017, large groups may be invited to join the Exchange. Will it be possible to overcome the selection issues and administrative obstacles that would arise? Large groups, whether insured or self-funded, typically pay rates consistent with their projected morbidity. Stated differently, the experience of those specific groups is a factor when setting rates. Assuming they were invited into an Exchange where they were offered the average rate of all groups that reflects average morbidity and projected costs, which groups do you think would enter the Exchange first? If you said, "the less healthy," you are right. All else equal, the less healthy large groups would pay less than warranted, driving up the average rate for all other Exchange members. Additionally, many large employers are self-funded, and it is unclear how self-funding would work with other Exchange mechanisms, such as risk adjusters and risk sharing. The Exchange could allow experience rating and find a way to overcome the various self-funded nuances. But this will require significant thought by people who understand the insurance market. For the Exchange to be attractive and successful, it is clear that Exchange leaders will have to overcome these obstacles and make it more efficient than the current method a large group uses to purchase coverage.

7. *What if small groups elect to self-fund?*

In the current understanding of the healthcare reforms, by implementing community rating (for individuals and groups up to 100 employees), healthier individuals and groups will pay more and less healthy groups will pay less. Some small groups, of course, are healthy one year, and less healthy the next, but other small groups stay healthy consistently. The consistently healthy small groups may decide to avoid paying the higher average premium by becoming self-funded. This could put upward rate pressure on the insured market as the healthiest groups exit. With that said, there may be ways state legislators can prevent these small groups from exiting the insured market.

8. *Is actuarial value the "right" comparison?*

Actuarial value is the most accurate way to compare health plans—but not the way the federal government is currently using it. ACA defines actuarial value as the given benefit plan's expected paid expenses for all members in the plan versus paying all covered services *for that specific plan* at 100%. The problem is that they do not adjust for the services covered by the plan. Which plan is better, a health plan that charges a 10% coinsurance for essential benefits or a health plan that charges a 10% coinsurance for essential benefits plus vision hardware (glasses and contacts) and health coaching? Both plans are considered to be Platinum using the government's definition; however, they clearly are not the same. Comparing expected paid costs to a common plan is

probably the better approach. (Of course, the materiality of this difference depends on how the government ultimately defines the essential benefits.)

9. Organizational considerations

Regardless of whether you house the Exchange authority within government or make it an independent body, there are a number of issues to consider. First is the need for the Exchange to coordinate with the state's Medicaid eligibility program. This might suggest housing the Exchange in the same governmental body that administers Medicaid (e.g., the Department of Health and Human Services). To what extent does the state want the Exchange to judge a plan's rate increases and decide to include or exclude them from the Exchange? The Department of Insurance might be a better choice if the state plans to closely govern rate increases through state filings, etc.

10. Information

What really matters when comparing health plans and benefits? There are many variables the states can rate health plans on, including, but not limited to:

- Customer service experience
- Provider network breadth, access, and quality
- Transparency of prices
- Patient blogs
- Ability to "push" information to patients
- Quality of disease management and wellness programs
- Claim payment timeliness and accuracy

The key is determining what factors matter and what the public wants while balancing the administrative burden to obtain and update these variables.

As West Virginia develops its health benefit Exchange, there are a number of items the State will need to consider. The most important items, which will determine the popularity and ultimately the effectiveness of the Exchange, are whether to make the Exchange mandatory (vs. voluntary) and whether to merge the individual and small group markets. Other factors West Virginia needs to deal with include determining the length of the open enrollment period, actuarial strategies, and, more generally, finding the right fit for the Exchange with the unique and specific needs of their populations.

GATHER MARKET DATA

The next step, and one that the State has already made some headway on, is to gather all of the health insurance market data. As a first step, Milliman would meet with the West Virginia Office of the Insurance Commission (OIC) to identify what information is already available and accessible. Some of this information may be available through annual statements or through insurance rate filings. Information from the OIC may include information on costs, enrollments and insurance brokers. Milliman also subscribes to Insurance Analyst Pro, which provides all the insurer statements and filings (including the new loss ratio filings)

Medical Expenditure Panel Survey (MEPS) data available from the Agency for Healthcare Research and Quality (AHRQ) may also provide additional information for understanding the West Virginia health insurance environment (e.g., employer offering rates by size, employee participation rates).

Our subject matter experts would use all of these tools, and more, to develop the foundation of data required to move forward.

ESTIMATES

This data would then be used to run a battery of estimates in order to move forward with proper and accurate identification of barriers and the adjustments required to deal with those barriers. The identification of these barriers and their solutions would allow us to move forward with the development of the business operations and implementation plans. As discussed previously in the *Actuarial Modeling of Exchange Financial Sustainability* section, Milliman's Healthcare Reform Financing Model (HCRFM) can be populated with population and cost estimates for West Virginia's insured market.

More detailed information about the HCRFM and how it works can be found in *Appendix I: Overview of Milliman's Healthcare Reform Financing Model (HCRFM)*.

CREATE SELF-SUSTAINING BUSINESS PLAN

The timely and successful completion of the steps above will provide the framework for completing the remaining services required for implementation of the Exchange and will drive the development of the business operations plan. The business plan will lay the roadmap for addressing the challenges of implementation. For example, the business plan will identify the approach, management and key milestones for the development and launch of the web portal for the Exchange.

Milliman understands that the information technology challenges for designing and implementing state insurance exchanges are quite complex. The health exchange technology infrastructure needs to offer a simple, easy-to-understand experience for potential enrollees. If the web portal designed for potential enrollees is difficult to use, confusing, works slowly or fails during an interactive session, it is likely that the user will be left with a poor opinion of the Exchange and may not be willing to try again. This could lead to lower than expected enrollment or a higher than expected projection of potential enrollees opting to use the call center.

The portals must facilitate health insurance choices by providing detailed information on available plans including rates and quality health metrics. With insurers potentially offering any number of ACA-defined Qualified Health Plans (QHPs), this will present a challenge in how to fairly and accurately display the array of necessary information for each plan. In addition, users of the portal will often possess very little knowledge of the insurance industry.

As difficult as these challenges will be to overcome, the majority of the challenges for a properly operating exchange technology infrastructure will actually come from the operational need to interface simultaneously and seamlessly with so many other systems. The infrastructure must support secure and quick transactions between the Exchange, the IRS, the state Medicaid system, employers, subscribers, providers, and many others. While some of these interconnectivities may already be in place, the addition of new government entities will create many new integration challenges.

Finally, the challenge posed by security and data flow control of the infrastructure cannot be overestimated. The proposed technology infrastructure must support compliance obligations such as HIPAA, as well as new operational issues such as payment segregation of funding for state mandated health benefits that are not required essential health benefits.

And this is just one example among many of the necessity for a clear, defined business operations plan to guide the way. It is also another key reason that Milliman believes the State must seek assistance from a professional actuarial firm with experience in the development of these complex systems.

Milliman has a practice that focuses on information technology and operations management. This practice has assisted clients with software and hardware evaluation, implementation and integration, project planning, project management, vendor selection, and strategy consulting related to a variety of systems. The group specializes in helping organizations improve operations through business process improvement and effective use of information systems—key skill sets for

developing a successful approach to recommending an appropriate process and procurement timeline in anticipation of the 2013 readiness metrics.

Our extensive experience in designing and implementing technology solutions and data control processes gives us the experience and expertise to develop the best fit process and corresponding timeline for ensuring that a robust operational and information technology infrastructure will be ready in time to meet readiness metrics in 2013 and to be fully operational by 2014. In addition, our extensive hands-on experience in technical writing, proposal development, market research and surveys, vendor selection management, strategic planning, creation of policies and procedures, and compliance services allow us to better understand the unique characteristics and operating environment relevant to this engagement. We understand what is possible and what is not likely possible for this initiative and can develop the corresponding timeline to meet your objective.

As mentioned before, we specialize in health insurance management, from operations to IT to Underwriting to Clinical care management and to the Actuarial and risk management. We have worked at and for carriers and know how to run successful insurance programs.

APPENDIX I: OVERVIEW OF MILLIMAN'S HEALTHCARE REFORM FINANCING MODEL (HCRFM)

Milliman's core Healthcare system reform modeling tool is called the Healthcare Reform Financing Model (HCRFM). Milliman has used the HCRFM in various forms to conduct state healthcare reform modeling in several states as well as for modeling the entire U.S. healthcare system and the healthcare systems of other countries. We will use this model extensively in performing the work that the Connector is requesting.

The HCRFM is Milliman's primary analytic engine to model the impact of healthcare reform provisions on the healthcare system. It was developed by Milliman to assist clients with the assessment of the potential impact of particular healthcare reform proposals. The creation of the HCRFM is the result of a collaborative effort among many Milliman consultants. The HCRFM projects the potential costs and movements of individuals, and the interaction between competing medical cost payors and providers, within and between the various insurance markets that comprise the United States healthcare system.

HCRFM modeling capabilities include provisions for:

- Up to 20 different market segments, each with its own set of demographic, change factors, healthcare cost, and premium rate determination assumptions.
- Five types of regulatory classes within each market segment.
- Multiple projection years in addition to the initial base year.
- Change algorithms applied to each individual and employer group in the census.
- Capability to reflect state-specific starting censuses and other assumptions.
- Morbidity projection based on a correlated stochastic process, including provision for alternative probability distributions.
- All assumptions are menu driven allowing Milliman to modify any assumption for baseline or sensitivity calculations.

The HCRFM allows for significant assumption flexibility while providing easy-to-use input screens, runtime efficiencies and output results that are easy to summarize into other formats for scenario comparisons and other desired purposes.

Switching (Change Factor) Process

The switching process models the probability of an individual switching from his current market segment or current insurance plan into each available competing market segment or to a different insurance plan within his current market, including the likelihood of remaining in his current market segment. This process is based on the premium variance between current and possible alternative market segment plans, adjusted by elasticity factors related to the individual's health status, current insured status, and income level at that time. The process also includes switching between private coverage options and public coverage options.

The switching process includes provisions for:

- Brand loyalty to a given insurance carrier.
- Intangibles (e.g., quality of provider network, carrier's distribution systems, etc.).
- Carrier claims expectations (premium underwriting) versus employer and individual's claims expectations.
- Availability of publicly funded option (Medicaid, CHIP, and Basic Health programs).

Premium Determinations

Premiums for each market segment are projected based on:

- Extent of experience pooling used in rating process
- Maximum rate increase allowed, either due to regulation or carrier's own rating practices
- Premium variance from the mean rate, either due to regulation or carrier's own rating practices
- Benefit richness of the insurance plan
- Administrative loading for the particular type of carrier

Provider Model

The Provider Model is a sub component of the HCRFM that estimates changes in utilization of various types of services within a market due to corresponding levels of reimbursement and capacity limitations.

The model performs these functions in general as follows:

- **Reimbursement:** The model compares reimbursement levels by market by type of service and based on research, estimates how providers will react to changes in the level of reimbursement. Such changes may result in limitations on services provided or shifts in the types or intensity of services. Shifts in market participation are also reflected through interaction with the entire healthcare reform model.

- **Capacity:** The model compares the target demand of a population in the market by type of service with the availability (supply) of services to that market, including recognition of all adjustments due to reimbursement levels. Capacity adjustments may be due to factors such as shortages of hospital beds, nurses, primary care or specialty physicians, drugs, or inadequate funding.

Any changes in service estimated due to the combination of impacts from reimbursements and capacity are recognized by changing utilization in the applicable market by type of service.

Model Results

Modeling results are summarized by market segment and projection year for five data elements: premium, claims, benefits, number of employers, and number of insureds. In addition, results are stored in a random access binary file. This allows for additional scenario testing. The benefit output allows for a comparison between original costs for the baseline (status quo) scenario with projected costs that may change over time due to the introduction of particular healthcare reforms.

Data Sources

The Healthcare Reform Financing Model (HCRFM) uses the following data sources, which are updated regularly.

- Milliman Health Cost Guidelines
- Milliman Medical Underwriting Guidelines
- Milliman surveys and research including the Milliman Group Health Insurance Survey, Milliman Medical Index, and proprietary research on provider discounts
- National Health Expenditures
- Medical Expenditure Panel Survey (MEPS)
- Kaiser State Health Facts, Kaiser Family Foundation reports
- Congressional Budget Office reports and research
- U.S. Census Bureau data
- Insurance company annual statements compiled through Highline
- Medicare 5% sample
- National Association of State Comprehensive Health Insurance Plans (NASCHIP) Data
- Medicaid Statistical Information System (MSIS) State Summary Datamart
- Medicare Trustees report

- Employee Benefit Research Institute public reports and special data runs
- Peer reviewed journals and other publicly available reports
- State-specific data, where available through Medicaid agency and/or state insurance department