

The LiveWell Health Risk Appraisal

Government to Business

Nebraska

B. Executive Summary

The LiveWell Survey, is a health risk appraisal developed by the Lincoln-Lancaster County Health Department and the Nebraska Department of Health and Human Services, in a joint effort to provide an instrument to companies who wish to actively manage their health care costs. In general, the only data insurance companies have to work with when it comes to projecting their costs, comes from claims made by those they cover. They then use these claims- based data projections, to set their rates. Unfortunately, claims information on average is only representative of about 30% of the population that is being covered. This means that the other 70% of that population are then just assumed to be of the same risk profile as those that make claims, and the insurance rates are then calculated out and charged to employers accordingly. Businesses, however, can gain leverage in their rate negotiations with the insurers if they have aggregated data from this health risk appraisal.

Of course the other goal of creating the LiveWell survey was not just to get it in the hands of employers, but ultimately to get it in the hands of the employees. Not many government web applications can say they have a direct impact in enhancing the health and longevity of its citizens. This one does.

How it works: A company is able to provide its employees with a short survey, which generates each individual a personal health report. Research shows that on average, 20% of respondents will make positive changes, just from seeing their outcomes. Then the company receives a HIPAA (Health Insurance Portability and Accountability Act) compliant set of reports to analyze where to gear their wellness programs to be most effective. In addition, the generalized information in the report can be used by the company as an alternative to claims data to leverage their position when negotiating for insurance coverage.

The LiveWell Survey project was collaborative on many levels. The project was initiated through a joint venture between Nebraska state and local government entities. Then, these public sector project members, courted private sector input through a series of meetings where companies and health coaches could give feedback on what they would like to see incorporated. Additionally, experts in many different health areas such as nutrition, addiction, and epidemiology were also consulted during the process, their insights providing the final shaping and polishing of the survey.

C. Business Problem and Solution

Health care costs are increasing at a rate four times faster than inflation, and employer-sponsored insurance is the leading source of health care coverage for most Americans. Without any tools to effectively negotiate insurance rates, employers, both large and small must commit to being charged whatever increases insurance companies deem

reasonable to cover their projected costs. Costs for health care coverage not only impact the bottom line of corporations, they also affect take-home pay for individuals and families. The Kaiser Family Foundation 2010 survey shows that because costs are increasing for employers, costs are increasing for employees. Worker contribution amounts towards health care coverage have increased 147% from 2000 to 2010.

So obviously, managing rising health insurance costs is a problem for businesses and individuals, however, combatting this by pulling together more meaningful and useful health related data for a covered population poses additional challenges. The privacy of individuals' health information must be protected, and it is not just enough to collect the data. When it is all put together it has to mean something to have value. This is what the LiveWell Survey has been providing for Nebraskans since July 2010.

There are other tools currently being offered to employers, which attempt to accomplish the same thing as the LiveWell Survey. However, when the state of Nebraska took a look at the available options, they were not satisfied that these other instruments were able to provide the kind of accurate, useful information they were attempting to put together.

In contrast to other health risk appraisals available, the Nebraska designed instrument has some significant advantages. Most importantly, the design of the survey is intended to align with the Center for Disease Control (CDC) Behavioral Risk Factor Surveillance System (BRFSS). This is the world's largest on-going health survey system, tracking health conditions and risk behaviors in the United States via a telephone interview system since 1984. Because the LiveWell Survey was designed to correlate with data collected by the CDC it is the only health risk appraisal that can benchmark against normative data. Company reports generated from the LiveWell Survey can be benchmarked against the data from their same industry across the United States giving an excellent picture of how their employee population's health profile compares to the averages. This allows companies to prioritize their health risks. It also means that scientific rigor provided by the CDC is used on most questions.

Another advantage the LiveWell Survey offers in comparison to other health appraisals, is that it includes a lost work section. This allows for collection of data where companies may not otherwise have access to this data, especially if they offer paid time off as opposed to specific sick leave days vs. vacation time.

The LiveWell Survey came into being through a combination of resources and alliances. Collaborating together, the Nebraska Department of Health and Human Services, and the Lincoln-Lancaster County Health Department used grant funding, to create the survey logic. This initial survey was then put online by a third party provider and beta-tested. There were several difficulties with the beta-survey. One was that the provider

was not equipped to handle a large volume of users at one time, which made it difficult to offer the survey to large employers. The major problem however, was with the reporting. While aggregate reports could be pulled together, it would take hours to collate the data for one report. Another one of the major pieces, benchmarking against BRFSS data was not even automated. Instead it involved a labor intensive, time consuming paper process.

In late 2008 the state and local agencies partnered with the state portal provider, Nebraska.gov, in order to completely re-create the online survey to be more a streamlined and powerful tool, which would come to be branded as the LiveWell Survey. The LiveWell survey is built with the Grails framework. This is a web-based framework which uses of the Groovy programming language, a dynamic programming language layered on top of the Java programming language and Java Virtual Machine, thus allowing seamless use Java-based libraries. The Grails framework is also built on top of well-known Java frameworks such as Spring, for HTTP request/response handling, and Hibernate, for database interaction. By using Java, Spring, and Hibernate, Grails is able to rely on already tried and tested technology to provide a stable framework for web application development. The survey also makes extensive use of Javascript and Ajax. A key component in the survey which uses this technology is the dynamic display of additional questions on a page based on user's input. This means the user only has to answer questions that pertain to their health status and they do not have to read lengthy instructions informing them which questions pertain to them. The Ajax ability also allows the survey to be presented in 30 sections of questions instead of a lengthy one-question-per-page format. Nebraska.gov also built a new administrative service for the LiveWell Survey with extensive reporting features that transformed what the reporting process, making the data more accessible, easier to breakdown, easier to correlate, and easier to integrate. The LiveWell branded survey was created under a self-funding model at no cost to the state or local agency, with a total cost avoidance to date of over \$80,000.

D. Significance of the Project

Technology as a tool to collect and integrate data is of course nothing new. What is innovative about the approach for the LiveWell Survey is the highly impactful purpose for which it has been implemented. As mentioned before, research shows that on average, 20% of respondents will make positive health changes, just from seeing their survey results. If a company includes a wellness program based on their company results, that number increases. The old way of doing business has not flattened the trajectory of medical inflation. We continue to develop chronic illness at a record pace, which causes insurance utilization to skyrocket on a parallel path. The problem is going to get much worse in the absence of employer action and intervention. Addressing the worsening health status of our nation is the key to controlling future health care

spending. The LiveWell Survey web based technology platform gives employers access to a wellness tool as well as data aggregation and real-time reporting customized for them. The result is that finally businesses have an instrument they can use to help reverse risks to the health of their workforce, and, also important, they have collected data to use to negotiate their health coverage costs.

There is yet another layer of significance to the LiveWell Survey project. The majority of other instruments of this type that are available are managed by the private sector (insurance companies). Because the Nebraska health appraisal is managed by the public sector, the state and local health organizations can use the aggregate reporting features to paint a larger picture of the health of the employed population on the city, county and/or state level. This allows them in turn to do the same thing the participating companies are able to do. Focus dollars and resources for community wellness programs in the areas where they are most necessary and will be of the biggest benefit. As a result of this, all citizens are positively impacted as their tax dollars go to the best use, and the health-related programs made available are tailored for them.

Though the purpose of the LiveWell Survey is data aggregation, protecting individuals' health information and encouraging good response rates was paramount. Each individual survey respondent creates their own profile, which does not require any personally identifiable information. The survey generates a unique, random user name for them, and they create their own password which is not accessible by any other party. All reporting is in compliance with the Health Insurance Portability and Accountability Act and the Genetic Information Non-discrimination Act guidelines. The web applications for both the individual survey and the survey administration are password protected and run under Secure Socket Layer encryption. The service provider, Nebraska.gov, is Cybertrust certified, and data is housed in a Tier 4 data center. The survey uses an easy to follow flow, and is compliant with section 508 of the Rehabilitation Act to be accessible to people with disabilities. Respondents can save and return to the survey if necessary. Progress bars on the left hand navigation readily show the respondent what section of the survey they are in and what percentage is left to complete. Questions that are not relevant to the respondent based on their answers to previous survey questions are not shown to them, making completion of the survey as efficient a process as possible. Respondents can choose to take the survey in either English or Spanish.

One unexpected outcome of building this instrument was when the LiveWell Survey was launched, it began generating interest from worksite wellness organizations outside of Nebraska. The Nebraska state and local health departments are now using licensing of the use of the survey as a revenue generator for the funding of local health initiatives for the state.

E. Benefit of the Project

As has previously been detailed here, there are financial benefits for both the businesses which have the opportunity to take advantage of the LiveWell Survey and their employees. Of course there are also the benefits for the individual that come with being provided their own health report and participation in a worksite wellness program.

One way the LiveWell survey is used is to maximize the effectiveness of worksite wellness programs by identifying what are the top modifiable risk factors in their employee population, and focusing resources in that direction. There have been many studies done that show how worksite wellness programs have a positive impact on the business' health related costs, which in turn means savings for employees. According to the American Heart Association:

- Fitness programs have reduced employer healthcare costs by 20% to 55%
- Reducing just one health risk increases a person's productivity on the job by 9% and reduces absenteeism by 2%
- For every \$1 the average company spends on its worksite wellness program, it receives an average net benefit of \$3.40 to \$7.88

Additionally, fit workers have fewer injuries. Several studies have shown that there is a significant reduction in the frequency and severity of workplace injuries among those who participate in corporate wellness programs. Worksite wellness programs tailored from data collected through the employee health appraisal create a healthier workforce while at the same time decreasing absenteeism, reducing medical claims costs, and improving employee productivity, recruitment, and retention. Of course government is one of the largest employers, and the LiveWell survey is open to them in this capacity as well. First to take the survey when it went live were the employees of the city of Lincoln.

The original projected usage rate was based upon only the company members for the city of Lincoln and Lancaster County employer wellness programs. The survey was originally intended for use solely for the purposes of the local Health Department worksite wellness initiatives, and it was not until after it was developed that interest started to grow outside of the local area. In 2010 (third quarter only) there were 1633 surveys collected in Nebraska, and in 1st quarter 2011, 1052 surveys have been submitted. Two other local Nebraska Health Departments have registered to use the survey in 2011, South Heartland District Health Department and Central District Health Department. Outside of the state, inquiries to use the survey have come from the local health organizations in California, Arizona, Ohio, and many other states. West Virginia is the first state outside of Nebraska to begin using the LiveWell Survey and they have already signed on companies for 2011.