

**P**hilosophically, most people agree that a properly run wellness program should reduce an organization's healthcare costs. As we all know, results-oriented wellness programs are designed to identify individuals with health risks, offer health improvement programs for those individuals, and then monitor the outcomes of those specific interventions.

Sometimes called "co-morbid" factors, these identified health risks are seen as pre-cursors to major diseases such as obesity, heart disease, osteoporosis, diabetes, etc. Most of the disease states identified within a wellness program are lifestyle modifiable, and those that are not modifiable through lifestyle changes can be identified for early pharmaceutical intervention. Indeed, wellness programs have come a long way in the last thirty years, now able to help circumvent potential catastrophic events and illnesses related to various disease states. But there's always room for improvement.

#### BRUSHING UP

One area where worksite health promotion

stands to strengthen its position is in the ability to translate outcomes into a language that insurance providers will understand. Doing this will require an overhaul in the traditional protocol that characterizes many current initiatives. For clarification, let's review what has become the fairly standard protocol for worksite wellness.

The traditional wellness program is usually comprised of the following protocol:

- + Administration of a Health Risk Appraisal
- + Collection of on-site biometrics, (e.g., height, weight, blood pressure, blood chemistry, body composition)
- + Study of reports that combine HRA data with biometric data
- + Implementation of group education classes that explain the results of the individual reports to participants
- + Generation of a "corporate report" (or aggregate summary) of all collected HRA data
- + Implementation of topic-specific educational interventions, (e.g., weight loss,

exercise prescription, stress management, smoking cessation, etc.)

- + Beginning one-on-one counseling for high-risk individuals
- + Organizing company wellness events throughout the year
- + Evaluating efforts

This traditional wellness protocol has been effective in identifying those employees most at-risk, and intervening with them in an attempt to yield lifestyle modifications. However, in moving toward a new model that will allow us as health promotion practitioners to more effectively communicate (and ultimately negotiate) with our health insurance providers, some questions must be answered.

For instance, once program evaluation has taken place and health care costs have indeed been reduced, we must ask whether this reduction in health care costs has been unambiguously tied to the wellness program. To take the issue a step further, we must also question whether health care utilization data from our evaluation efforts

yields an offset in utilization related to wellness participants or to the employee population as a whole. Most importantly, if we are aiming to achieve bargaining power with insurance providers, we must ultimately determine whether an audit of this type will convince the insurer that the relative financial risk has actually been reduced. In order to answer this ultimate question, you need to understand how health insurance works.

### HEALTH INSURANCE 101

To truly communicate with the powers that be in health insurance, you must become familiar with the procedures and methods that insurers use to equate physical risks with financial risks in regard to an existing or prospective client. Insurers utilize actuarial science to calculate financial risks. Though it may sound complex, the actuarial science utilizes very basic information to make its calculations. This information includes:

- + Age
- + Gender ratio
- + Geographical location
- + Standard industry code, (e.g., auto industry, timber industry, transportation, etc.)
- + Past years' utilization

After this information is collected, it is then input and compared to normative data. In other words, the group in focus is compared to other, like populations. Based on experience related to other groups or like demographics, the insurer assumes that the potential client will have similar health care utilization patterns. However, as seen in Figure 1, there is a great deal of variability or randomness that is still not accounted for in their calculations—even the insurer would acknowledge this. Herein lies a large part of the challenge of rising health care costs in organizations that would be considered “healthier” than most.

Realizing that the standard age/gender model for cost prediction involves a great deal of random utilization which can leave them financially vulnerable, the insurers protect themselves by factoring in a pricing percentage increase above and beyond their initial actuarial cost predictions. In some cases, this percentage increase can be as high as 10-15%.

Ready for the irony? The fact is, the insurer actually has the ability to create more accurate cost prediction models (without the 10-15% protection hike) if they have trend or archival data on existing or prospective clients. However, in today's health care environment, corporations are notorious for being “annual shoppers.” In a characteristic fashion, corporations stay with the insurer for one year, dump heavy utilization on the insurer, and then re-enter the open market to shop for a new provider or insurer. Corporations do this to avoid high rate hikes, but it only works in the short term. Because of these “annual shoppers,” insurers seldom have time to develop useful trend data and more accurate pricing models for their corporate clients.

Given the rising costs of health care, it would seem a new approach might be needed to help control those costs. This approach would involve new procedures for running and evaluating wellness programs that would enable organizations to work with insurers in a mutual effort to control the rising cost of health care.

### COME TOGETHER

In order for wellness programs to work hand in hand with the insurer at controlling costs, data yielded from the wellness program must be put into a format that insurers can interpret. This format should combine col-

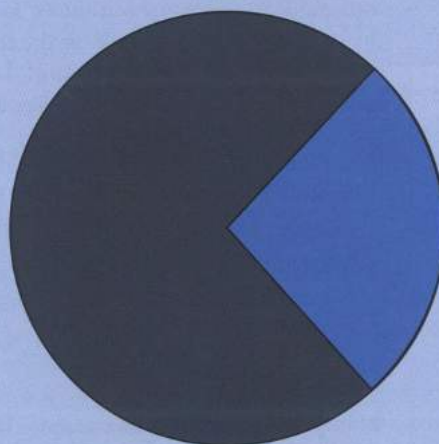
lected health risk appraisal data, biometric data, and educational intervention outcomes with health care utilization data. This combination of data sets and interpretation of this data has the potential to make a more accurate cost prediction model, measure the offset in utilization due to wellness, and create a powerful negotiation tool for corporations that implement comprehensive results-oriented wellness programs.

Data management and interpretation done in this fashion can also be helpful to the insurer. Insurers in the United States are facing a major problem related to customer retention, most of which is due to the inability to accurately predict costs associated with existing clients. This inability to accurately predict costs leads to escalated pricing structures, which in turn leads to lost clients. By utilizing wellness data in combination with utilization data, the insurer is able to realize more accurate trends occurring within a particular population. Based on the richness of wellness data combined with utilization data, it is reasonable to assume that one year of this type of information should be equivalent to three years of standard age/gender utilization information that insurers usually rely upon.

The predictive power of a combined wellness/utilization data model is authenticated by a quote out of the *Handbook of Health Economics*, March 31, 1999:

FIGURE 1

## FACTORS EXPLAINING VARIATION IN HEALTH SPENDING

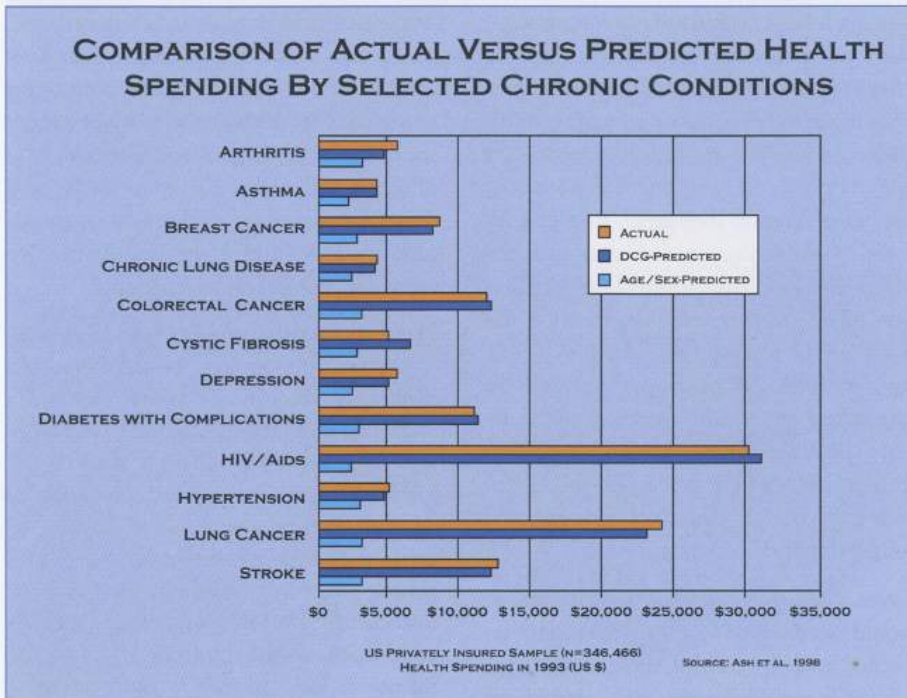


■ RANDOM FACTORS

■ OTHER FACTORS COMBINED

(AGE-SEX, HEALTH STATUS, SOCIO-ECONOMIC, PROVIDER, INPUT PRICES, MARKET POWER, BENEFIT PLAN)

FIGURE 2



Risk adjustment has come a long way over the past two decades, increasing both in its predictive power and in its sensitivity to creating appropriate incentives. It appears likely that the next decade will also see large improvements in predictive power, with the improvements coming in many areas. Those that seem most promising will include using more refined clinical information, pharmaceutical data, combining claims with self-reported information, or building better models of patterns of service over time.

**MODEL OF ACCURACY**

The implication of the quote is that by combining claims data with self-reported information (e.g., health risk appraisal data) a more accurate prediction model can be compiled. In the past, insurers have successfully built models of this type; however, they have not included health risk appraisal data or biometric data. The closest the insurers have come to this “futuristic” model is to create a “Diagnostic Cost Group Model” (DCG). Essentially, this type of model clusters diagnoses into clinically standardized groups. This is done through claims analysis, associating risk factors to individuals (usually by examining a medical history questionnaire), creating a trend, and then predicting future expenditures—this time more accurately.

The accuracy of the DCG model as compared to age/sex predicted models and

actual expenditures are reflected in Figure 2. As this chart shows, DCG methods of cost prediction are much more accurate than normal age/gender models. With a better understanding of the pricing methods that insurers currently utilize, better wellness protocols can be constructed which will produce more usable data to help validate that wellness programming actually reduces health care costs. At the very least this data will help to differentiate the wellness population from the normative population.

Data collected from a wellness program has the ability to yield a wealth of information. However, if we expect to sit at the table with insurance providers and negotiate lower (or flat) health care rates, we as health promotion professionals must know how to compile our information into a format that will be deemed credible to the insurers. A wellness program protocol better suited for bargaining might look like this:

- + Administer Health Risk Appraisal (e.g., including questions that identify individuals with pre-cursors to high utilization patterns)
- + Administer on-site biometrics
- + Generate personal reports
- + Implement group education classes explaining the results of the personal reports to participants

- + Generate a corporate or aggregate summary of all collected HRA data
- + Risk-stratify wellness population (i.e., low, medium and high-risk) through a system of risk factor accounting, by equating individual risk factors to each individual
- + Implement one-on-one counseling to identified high-risk participants and monitor outcomes
- + Implement organization-wide wellness events throughout the year (e.g., corporate walks, cooking classes, wellness contests, etc.)
- + Evaluate and compile results
- + Compare risk-stratified population to actual utilization data, note relationships between associated risk factors and individual utilization patterns
- + Compare wellness versus non-wellness participants’ utilization patterns
- + Account for any variability that may affect utilization patterns other than wellness versus non-wellness participation (e.g., gender, benefits plan design, age, etc.)
- + Group high-risk participants by risk factor accounting and by auditing the utilization data for existing utilization patterns related to chronic conditions
- + Analyze utilization data for catastrophic events that have occurred over the past year. Remember these events have already occurred and will have an impact on the insurers’ future pricing models
- + Compile all outcomes data into a readable format that the insurer can understand prior to insurance re-enrollment dates
- + Allow insurer to submit bid for upcoming insurance coverage
- + After bid is submitted, return to insurer and present wellness/utilization data to negotiate better pricing structure—or at the very least reimbursement for the wellness program

**PROOF IS IN THE PAYOFF**

This new wellness protocol has successfully been used to negotiate lowered insurance quotes within two organizations. One organization was a hospital

with approximately 3,000 employees and the other was a manufacturer with approximately 800 employees.

The hospital utilized the data yielded by the new wellness model to negotiate lowered re-insurance rates or stop-loss insurance rates. The hospital was self-insured; however, they had re-insurance to cover them for catastrophic claims over \$225,000. With the data yielded from the wellness program (see examples of data presentation in Figures 3 & 4) the hospital was able to negotiate an 8% reduction in the re-insurance rate for the upcoming year. The 8% savings in re-insurance accounted for a savings of approximately \$24,000. The hospital also used their data to measure the offset in health care utilization. Due to the wellness program, the measured offset in utilization accounted for a savings of \$718,240 in the year 2000. Comparable savings were documented for the years 1997 through 1999.

The manufacturer used the wellness/utilization data to negotiate third party insurance rates and re-insurance rates for the upcoming year. The difference in the first bid as compared the final bid accounted for a savings of \$600,000.

### FORECAST FOR TOMORROW? SUNNY, COOL

In summary, the new wellness protocol described here has the ability to yield data useful to both the insurer and the employer. In theory, even if the new wellness protocol does not result in lifestyle modification or reduction of risk factors, the data itself is still of great value. The very fact an employer now has a method to forecast health care expense is of great value when it comes time for budgeting. The data also helps to ensure the continued existence of the wellness program because of its ability to collect this valuable forecasting data. ★

FIGURE 3

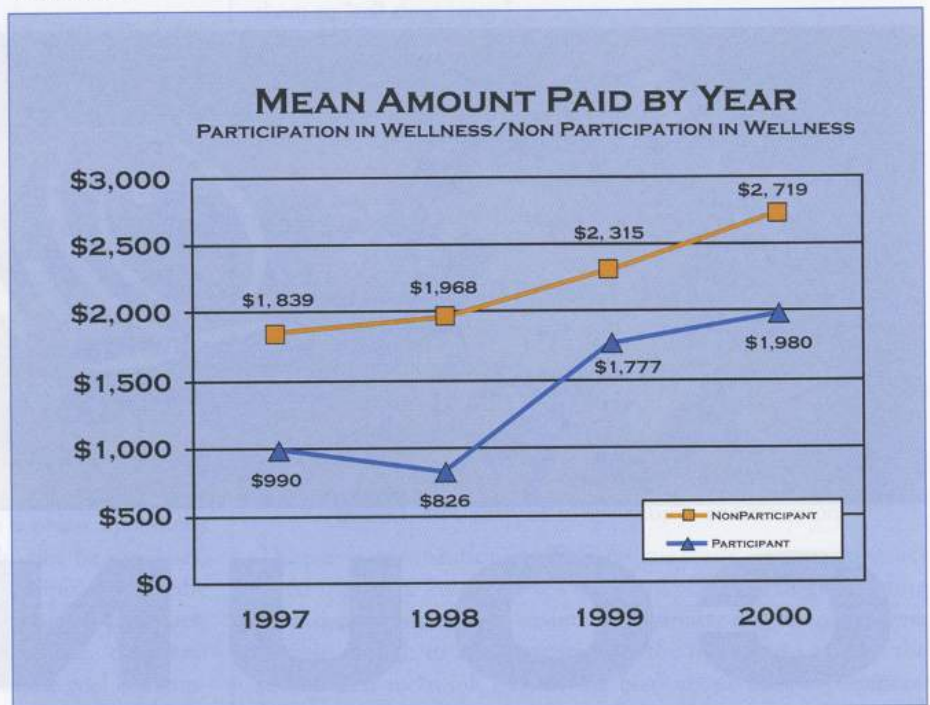
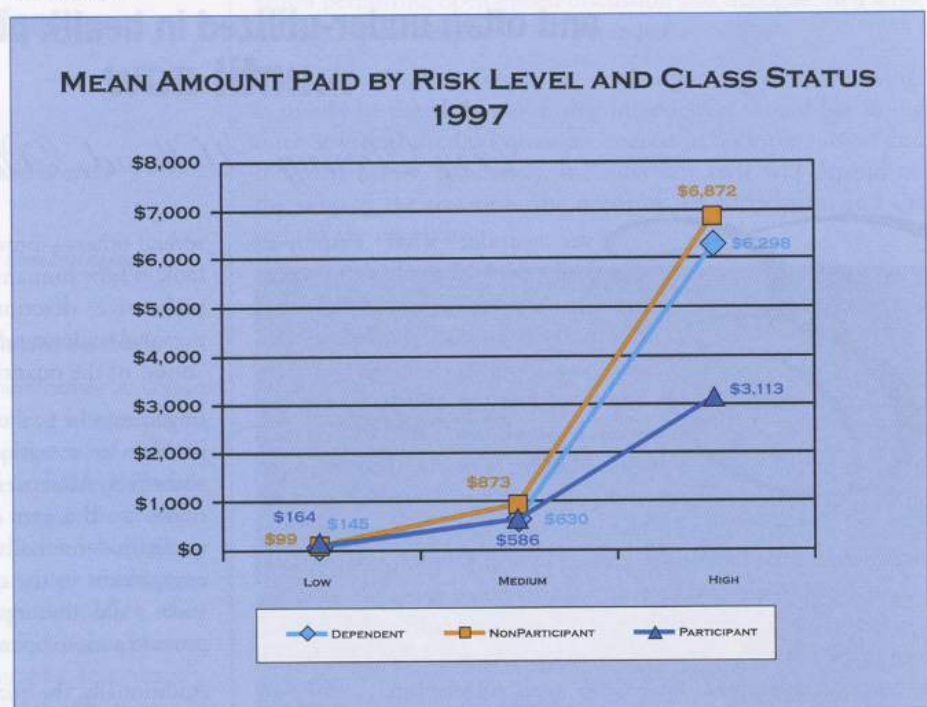


FIGURE 4



### ABOUT THE EXPERT: Richard Kersh

Richard Kersh is the Founder and President of Kersh Risk Management, formerly Kersh Wellness Management. Kersh Risk Management is based in Russellville, Arkansas and has been in business for 14 years. Richard has a master's degree in Exercise Physiology from the University of Arkansas and is currently an adjunct professor in wellness science at Arkansas Tech University. As President of Kersh Risk Management, Richard Kersh has

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