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The Way To Wellness



The increase in corporate wellness programs is creating opportunities for actuaries. Here's how to get in on the action. [By David A. Sotelo](#)

It's difficult to argue that we aren't in the middle of an employee wellness revolution. With average U.S. insurance premiums topping \$15,000 per family per year for employer-sponsored health coverage,¹ employers and payers alike are searching harder than ever for new and creative ways to rein in health care spending. Recent studies report that more than 80 percent of American employers with at least 50 employees have some form of wellness program already in place,² and the Affordable Care Act has placed wellness in the spotlight for smaller employers by facilitating access to these programs for those who may have previously found them financially unjustifiable.





Given the bright future ahead for wellness programs in the corporate workplace, it seems obvious that every health actuary in the United States should be familiar with at least the core concepts of wellness product design and evaluation. However, as more and more insurers are creating and launching their own proprietary wellness initiatives, this budding field has eluded the grasp of most insurance organization actuaries.

What many health actuaries may not realize is that our competencies in pricing and financial evaluation are valuable assets that go largely unrepresented in the field of wellness and health promotion. Without this crucial angle, wellness program product design often lacks an important focus on cost effectiveness, and many in-

surers' wellness products have evolved as lost children managed outside of the core health plan leadership circle. The future success of these products will depend on insurers' ability to design highly cost-effective programs with results that can be reconciled to and integrated with trends in medical and pharmacy claim costs.



A PRIMER ON WELLNESS AND HEALTH PROMOTION

Wellness is a broad term describing employer-centric strategies to combat unhealthy activities that contribute to avoidable health care spending. It covers everything from employee gym memberships to targeted one-on-one health coaching. This writing specifically focuses

on wellness programs or packages of programs designed, marketed and administered by health insurance organizations.

Most comprehensive wellness product portfolios consist of a variety of programs loosely distinguished by whether or not they are on-site. On-site programs are services provided by health care practitioners and educators at the employer's physical worksite, including live nurse screenings, flu and immunization clinics, and health education classes. Programs that are not traditionally provided on-site include health risk questionnaires, multi-stage group fitness competitions and self-paced lifestyle improvement courses.

The evaluation of wellness programs and their benefits from the *employer's* perspective is a topic that has already received some attention from within the health care industry. The Health Project's C. Everett Koop Award, for example, recognizes programs with demonstrated success promoting personal health and cost-effective health care utilization. Award recipients are typically large employer groups with a multi-level evaluation framework for their own wellness and health promotion programs. The focus of their reported success, however, is on ROI in terms of reduced sick days, enhanced productivity, and reductions to disability costs in addition to any medical and pharmacy cost savings. Many of these measures have limited relevance to health plans with a uniquely different set of wellness program goals.

To an insurer, wellness programs offered alongside comprehensive major medical coverage offer two primary advantages:

Wellness Program Research Project



IF YOU'VE BEEN WONDERING lately about opportunities for actuaries in the world of wellness programs, you're in luck! The SOA has partnered with Sibson Consulting to conduct a research project on a proposed actuarial model for wellness.

The objectives for the study are:

- Envision the possibilities for an actuarial model and the actuary's role in wellness;
- Document what currently exists in the marketplace; and
- Establish a conceptual actuarial model framework to support actuaries in the modeling, evaluation and assessment of wellness programs and the impact of health on the various actuarial practice areas.

The project is anticipated to finish in fall 2012. It will be available on the SOA website in the Health Research Projects section. If you have any questions about the project, please contact Steve Siegel at ssiegel@soa.org.



1. Suppression of health care cost trend due to reduced utilization and severity of illness.
2. Member retention *and* growth, most effectively when extended to employees who are uncovered or insured by a competing health plan.

Understanding the extent to which wellness programs realize these objectives and designing programs that achieve these goals cost-effectively are the two major playing chips that a health plan actuary can bring to the table.



THE ACTUARY AS AN EVALUATOR

Performance evaluation for wellness programs to date has primarily focused on measuring the behaviors and health status measures directly targeted by these programs. It is common to report on “the number of participants” who have “above average/below average/increased/decreased” measures such as “cigarette use/salt intake/cholesterol levels/BMI.” Ordinarily, these metrics are sampled once before the wellness program, and a second time afterward. Measurements for those participating in the program may be compared against non-participants, or against standardized benchmarks.

Besides the statistical bias that is evident in these types of studies, these metrics don’t address the primary factor that drives employers to adopt these programs in the first place: reining in medical expenses. Actuaries are equipped with the knowledge and tools to answer the question, “How has wellness program participation contributed to medical cost savings?”

Approaches to answering this question are not new or revolutionary. Many of the tools available to actuaries evaluating wellness and health promotion programs

program can be compared to non-participants or members who were ineligible to participate. Health plans can leverage the size of their book of business to create samples with high statistical credibility, and can enhance the model by applying risk adjustment to reduce the effect of selection bias.

Using regression models, dummy variables can be assigned to participating and non-participating populations to test for statistically significant effects of wellness programs. An application of this

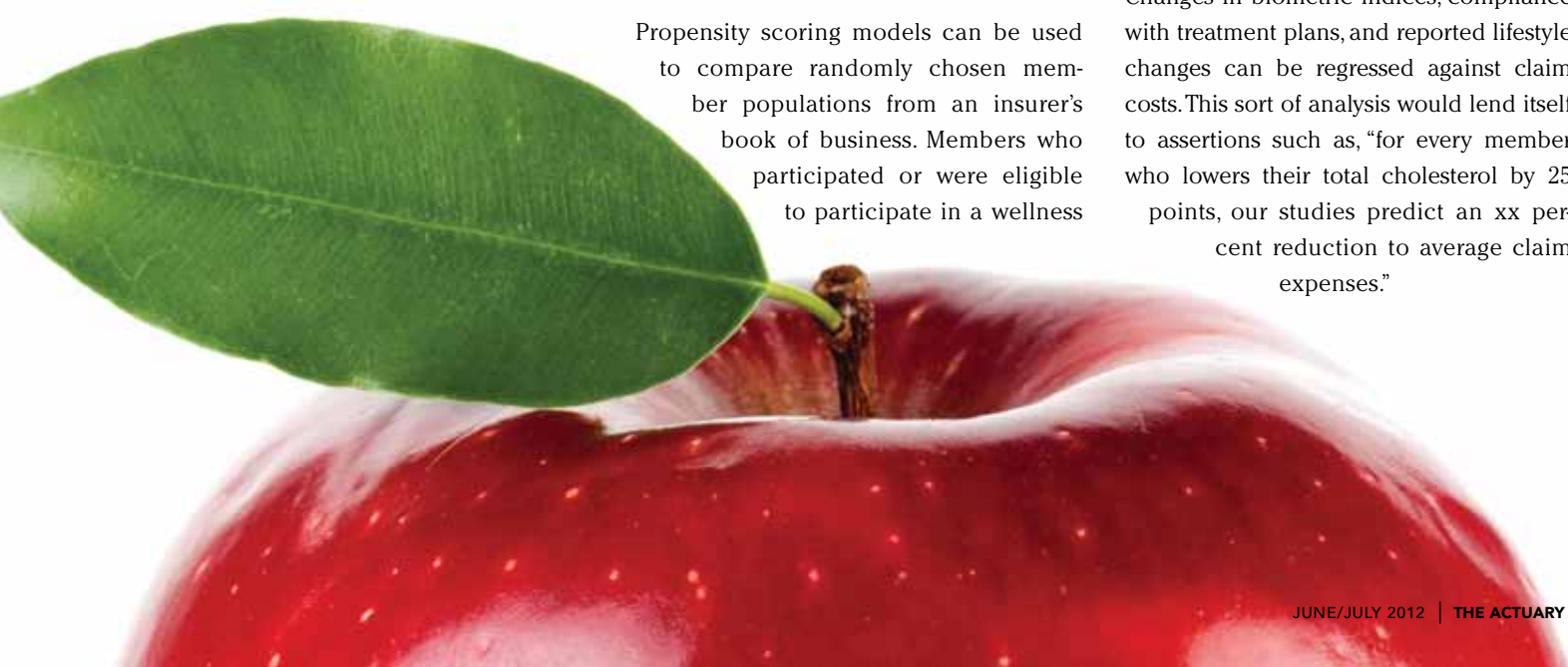
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have already been tested and refined on another class of health care interventions: disease management (DM) programs. The work of transforming complex financial analyses designed to measure an employer’s return on its DM investment into a framework relevant to an insurer measuring the impact of its wellness program is a bridge that few actuaries have attempted to cross.

Propensity scoring models can be used to compare randomly chosen member populations from an insurer’s book of business. Members who participated or were eligible to participate in a wellness

analysis would be to regress participation in a wellness program against year-over-year changes in claim costs for participating versus non-participating, or eligible versus non-eligible populations.

A more sophisticated extension of regression analysis would marry wellness program participation data with clinical measurements from the physician’s office. Changes in biometric indices, compliance with treatment plans, and reported lifestyle changes can be regressed against claim costs. This sort of analysis would lend itself to assertions such as, “for every member who lowers their total cholesterol by 25 points, our studies predict an xx percent reduction to average claim expenses.”



More Information on Wellness



FOR MORE INFORMATION on this subject, visit the blog post by Andrew Sykes, ASA, FFA, at www.blog.soa.org, search term Andrew Sykes, where he discusses turning wellness from a dream to a real business advantage.

In addition to measuring the impact of wellness on cost trends for existing members, health plans will also need to understand the effect that these programs have on member retention and, in cases where non-members are eligible to participate, membership growth. The value that actuaries bring to this discussion is our ability to identify and evaluate the drivers of membership retention and growth attributable to sources other than wellness program participation. By factoring out variance due to changes in employer contribution strategy, member cost sharing and network adequacy, actuaries can build an evaluation framework that singles out the effect of wellness programs alone on member retention and growth.



THE ACTUARY AS AN ADVOCATE

In addition to providing retrospective analytics on performance, actuaries can also make valuable contributions to prospective strategy, design and pricing for wellness products. In the absence of a strategic focus on performance objectives, it's easy for wellness and health promotion product leaders to overemphasize the value of brand marketing and competitive benchmarking alone when developing goals for in-house wellness and health promotion products, without fully understanding the full marginal economic benefit generated by these programs.

Insurers' wellness program strategies have historically been only loosely results-oriented. A major challenge here is the long turnaround time before positive results are realized on investment in preventive-oriented health promotion activities. Similarly, the quantification of positive out-

comes for wellness programs has not been historically well defined. Proper wellness program strategy for health plans should have clearly defined goals for medical cost trend suppression and membership retention/growth, including an appropriate turnaround time (in years) before positive results are to be expected.

Actuaries are able to place quantifiable value on these measures and develop comparative analyses that advocate for strategies most effectively aligned toward achieving wellness program goals. Actuaries can address questions such as: "What is the minimum number of participants needed to break even on per-purchaser start-up costs?" "What is the marginal benefit of each new member conversion that results from non-member program participation?" and, "At what point in time should wellness activities begin to have a measurable effect on cost trends and clinical health measures?"

Responsible wellness program pricing should be informed by all tangible costs, including development, overhead, marketing and fees, as well as intangible benefits that offset those costs, such as membership growth that results from enhanced brand recognition. Actuaries must approach wellness program pricing from a holistic perspective, often requiring evangelical skills at communicating and socializing economic concepts and drivers that are difficult to understand and easy to ignore.

Juggling pricing decisions for a portfolio of unique wellness products requires a deep understanding of the economics behind each one. For on-site programs, as





one example, many of the services performed at the employer's worksite are already accessible to members visiting the doctor's office. The actuary's contribution here is the ability to capture and illustrate the additional resources needed to deliver these services at the worksite instead of the doctor's office, as well as demonstrating the offsetting gain to the health plan in doing so. The actuary can also leverage skills at evaluating and interpreting emerging claim experience to opine on whether or not participation targets for various wellness programs are reasonable given historical patterns.

As wellness programs have gained more traction in the workplace, employers have begun to demand stronger demonstrations of value. Traditional pitches focus on improvements in self-reported health status among members participating in wellness programs. Emergent approaches merge clinical outcomes with self-reported data to add to the demonstration of improved health status (e.g., reduced BMI, higher preventive screening rates and clinical outcome benchmarking). The next evolution of this value demonstration will involve linking improvements in health status to reductions in medical costs. For experience-rated groups, this is a powerful marketing tool that the actuary will be instrumental in shaping.

Actuaries are the key to connecting the economics of wellness programs with insurance premiums charged for medical coverage. The health plan that can offer a multi-year rate guarantee or future renewal premium ceiling contingent on minimum threshold participation in a wellness program has a powerful edge over those

who can only offer promises of health status improvement. Defining guardrails and eligibility for this type of arrangement is impossible without the involvement of actuaries who have one foot in health plan ratemaking and pricing.



POSITIONING THE ACTUARY AS A WELLNESS LEADER

To wellness program leaders, the value that actuaries can bring to the table is simply not understood. Actuaries must take a proactive role in broadcasting this value, including bringing wellness stakeholders into the pricing and ratemaking process. Actuaries must also find opportunities to extend their services and expertise to wellness product managers and decision makers whenever possible.

Considering the bright future ahead for wellness and health promotion programs, it is important that actuaries embrace this nontraditional field instead of dismissing it as outside the sphere of actuarial expertise. As insurance organizations look for new and creative ways to apply their resources toward bending health care cost trend in evolving markets and regulatory environments, wellness and health promotion appear to be gaining more and more traction as viable tools for staying on the competitive edge. **A**

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ENDNOTES

- ¹ "Employer Health Benefits: 2011 Summary of Findings," The Kaiser Family Foundation and Health Research & Education Trust. 2011. <http://ehbs.kff.org/pdf/8226.pdf>
- ² "Building a Well Workplace: Six Reasons Why Health Promotion Makes Good Business Sense," Wellness Council of America. <http://www.welcoa.org/wellworkplace/index.php>

