Acknowledgments

Engagement Use of Incentives Work Group

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Despite years of quality initiatives, program development and implementation, the United States still struggles to better manage health care costs and improve the health of the population. Many consider patient and consumer engagement for both wellness and condition/disease management to be the key to significantly bending the cost curve and improving the health and quality of care. A 2010 employer survey conducted by Towers Watson reported that 41 percent of employers surveyed felt that the underuse of preventive services was the top challenge they face in maintaining affordable coverage. In addition, 58 percent selected employee engagement as the biggest obstacle to changing employee behavior related to health.¹

Incentives can be a key strategy to engage individuals in their care and their overall health. Use of incentives is on the rise and commonly deployed in worksite health management programs.² A recent survey by Mercer Health Benefits reported that 52 percent of businesses with 10,000+ employees and 33 percent of businesses with 500+ employees incorporate some type of incentive into their health and wellness programs. Despite their broad use in the employer space, there are many questions regarding how to incorporate the use of incentives into an employer’s plan design and culture or how they might be used in different health care-related models such as provider-driven models.

The following reference document developed by the Care Continuum Alliance strives to identify and offer insight into the various questions that surround the creation and utilization of incentives. Topics explored include the role of organizational culture in an incentive design program, the relevance of psychomotivational theory and how it helps drive decisions regarding types of incentives, incentive designs currently being utilized in the industry, budgetary considerations, emerging issues and evaluation strategies for incentive programs. The intent of this information is to inform and offer evidence-based guidance on a variety of incentive-related topics.
Learnings and Challenges

Incentives are widely used to bring about desired health-related behaviors, such as completing a health risk assessment (HRA), choosing an in-network clinician, or participating in a chronic care management program. Questions remain about how much, how long, for whom, and what type of incentives work best. Unfortunately, there is no single answer that applies across all organizations or even units within an organization.

Evaluations of incentive programs indicate that they are likely to have a positive effect, but results vary considerably. What accounts for the variation? And how can organizations avoid costly misguided incentive programs? These are questions that are currently being researched by several organizations and research houses but there is some evidence that can point us in the right direction.

We know for example that certain types of incentives are prevalent in the industry. The Mercer National Survey of Employer Sponsored Health Plans offers insight in Figure 1.3

There is also research that suggests factors that contribute to the success of incentive programs. Seaverson et al.4 offers insight into the specific factors that can lead to increased participation in a health risk assessment completion (see Figure 2).

Another challenge—and opportunity for additional research—is a better understanding of the amount of incentive that is needed to yield the desired action. Research conducted by Taitel et al.5 suggested specific dollar amounts that may yield certain levels of participation. For example,

Figure 3 displays the relationship between the dollar amount of the incentive and the health risk assessment completion rate for that dollar amount. The research points out that, for this particular study a $120 premium differential was responsible for a 60 percent participation rate for an employer who had a medium level of communication and organizational commitment. In addition, for an employer who had a high level of communication and organizational commitment, a $240 premium differential incentive resulted in an 80 percent participation rate.
FIGURE 2. COMMUNICATIONS AND CULTURE DETERMINE INCENTIVE PROGRAM SUCCESS, REGARDLESS OF INCENTIVE TYPE

HRA Participation by Incentive Design, Communication Strategy, and Worksite Culture

Source: Seaverson, E., Grossmeier, J., Miller, T., and Anderson, D. The role of Incentive design, incentive value, communications strategy, and worksite culture on health risk assessment participation. American Journal of Health Promotion. 23(5) 343-352, May/June 2009.

FIGURE 3. HA COMPLETION RATE BY INCENTIVE VALUE

Chapter 1 – Incentive Design
Raphaela O’Day, PhD, and Helene Forte, RN, MS, PAHM

What is meant by incentive design?
The impact of incentives on behavior change and motivation has been a source of extensive and somewhat inconclusive research. In an attempt to optimize incentive impact, creative methods have been developed to drive both initial behavior (participation) and to attempt to impact longer term behavior change (engagement). Incentives are one tool embedded in a larger framework of health and wellness promoting initiatives and if designed well may produce additional motive force in some individuals. It is important to keep in mind that things like organizational culture of health, effective marketing and communications, and fostering social support such as in the form of health champions are additional factors which influence participation and engagement and may in some cases reduce the need for monetary incentives.  

What are the different types of incentive designs?
An overarching distinction between incentive designs is the “carrot” versus the “stick” approach. The carrot approach has been associated with any incentive that rewards desired behavior. The stick approach is considered a disincentive or penalty for a variety of factors ranging from non-participation to outcomes. A 2011 Healthcare Intelligence Network report indicates that 79 percent of survey respondents did not penalize for health risk factor or non-compliance. The appropriate balance of the two approaches is heavily dependent on factors including the desired behavior change, individual risk factors, and the philosophy of the organization. Additionally, as with any incentive design, ethical and legal constraints are critically important.

What are the different types of incentives that are being used?
There are generally two primary types of incentives currently used. These include cash/monetary incentives and benefit design based incentives. Some of the currently used monetary incentives include cash, gift cards, merchandise, gym memberships and time-off. A few of the health benefit incentive designs include health premium reductions, HSA contributions, co-pay reductions/waivers, and tiered benefit design.

Recent survey data suggests that cash incentives are on the decline and benefit design based incentives are on the rise. This may be due in part to the 1996 provision of the Health Insurance Portability and Accountability Act (HIPAA) which permitted employers to offer premium discounts or rebates of up to 20 percent for individuals who met criteria or participate in programs “reasonably designed to promote health and prevent disease.” Additionally, in 2014, the Patient Protection and Affordable Care Act will enhance such discounts by allowing group health plans to provide up to a 30 percent discount for wellness program participation. Due to these changes, there may well be an even greater increase in benefit design based incentives in the coming years and will allow for additional research to establish the efficacy of such approaches.

Both incentive designs and the types of incentives provided are limited only to legal and creative restraints. It is important therefore to build an incentive design that optimizes impact on motive forces and compels an individual to initiate desired behavior change. Building an effective incentive design therefore requires knowledge of the individual, the behavior and behavior change process that is being targeted, and legal considerations and constraints.

What is the efficacy of different incentive design strategies?
Although the field is in great flux, there is an emerging body of research that may offer guidance to employers and providers of wellness services. The results are mixed although patterns seem to be emerging. More frequently than not, study findings suggest that incentives will increase initial response to the incented behavior, such as health risk assessment participation. Conversely, studies have shown that incentives are not particularly effective at producing long-term behavior change. A 2008 meta-analysis of the incentive literature concluded that incentives can influence health-related behavior. The same analysis also points out that there are significant limitations of the reviewed literature to provide clear guidance around the design and implementation of effective incentive programs.

More recent research has focused on incentivizing behavioral outcomes rather than initial participation. This research is in its infancy, and the behaviors studied are limited. Additionally, they often focus on behaviors that have distinct clinical end points such as quitting smoking and weight loss. Many health and wellness behaviors such as weight maintenance, diabetes management, maintaining regular physical activity, etc., require sustained lifestyle changes which may be more difficult to support and sustain through the use of incentives.

Additionally, the research published on providing incentives for outcomes (smoking cessation, weight loss, etc.) steadily increased the amount of incentive given over time. Although smoking cessation at 12 months seems to be fairly stable
(95 percent of smokers abstinent at 12 months will remain so at two-year follow-up\(^{14}\)), other behaviors such as weight loss/maintenance, diabetes management, maintenance of increased physical activity, etc., do not necessarily follow the same patterns. This suggests that long-term sustainability of incentives needs to be considered when planning an incentive strategy.

**What are some key considerations for developing and or deciding on a specific incentive design?**

Efforts and decisions made to control health care costs have become an executive level issue for most organizations. Companies are no longer questioning the value of incentives, but are evaluating how best to invest in them to maximize the impact on their medical trend. As organizations explore the use of incentives, key areas of consideration include: program budget, desired outcomes, impact on motivation, and incentive sustainability.

In order to maximize an incentive’s impact, organizations must first understand how much money they have in the budget for offering incentives. Once a dollar amount is projected, program administrators will need to project how many people will participate and maximum amount of value (dollars) per participant. The larger the incentive the more likely an increase in participation and engagement rates; however, care must be taken to ensure it is a value that can be sustained year over year.

Organizations must also determine the desired program outcome when creating incentives. For example, if the goal of the program is for employees to complete a health risk assessment or do biometric testing, the focus of the incentive should be completion of the task. Research suggests that incentives for one-time events can be very successful.\(^{9}\) If, however, the goal of the program is to work with a health coach or nurse, then completion of a number of coaching sessions might be an appropriate requirement for the incentive.

Understanding your employee population and what motivates them is critical to choosing the incentive design that will help achieve the desired program goals. Research suggests cash and benefit-based incentives are the biggest motivators.\(^{15}\) Individuals are motivated by different things, and providing more than one type of incentive option will help drive participation and engagement.

Lastly, incentive sustainability must be considered as well. When developing programs, it is important to consider whether the incentive value or type of incentive can be sustained over time. It is important to develop systems and processes (or partner with a vendor who can provide these) that allow for easy tracking, administration and reporting of incentive participation and outcomes. Through data analysis of this information, an organization will be able to tailor the incentive program that has proven to be the most successful in engaging and motivating the population.

**How does an organization go about choosing an incentive design?**

1. **Gather information.** When choosing an incentive program that will work best for an organization, it is important to explore options. Strategies to explore could include benchmarking with like organizations, meeting with vendors and consultants to learn about programs they have implemented, and researching programs in the literature.

2. **Survey employees.** Understanding what motivates your employees is an essential consideration. Surveying employees will provide additional insight into the types of incentives that will be most meaningful. In addition, consider offering a choice of incentives. While more complex to administer, a variety of incentive options will increase participation and engagement rates.\(^{4}\)

3. **Keep it simple and learn what works; then expand.** Organizations new to incentive programs should consider keeping it simple at first. Develop a program that can be easily administered and measured. Once the program has proven successful, it can be expanded based on the data obtained from the current incentive. Keep in mind to focus your incentive on factors that will lead to behavior change and that are financially sustainable for your organization.

4. **Make it a collaborative effort.** As an incentive program is being developed, it is important to involve the entire organization. In particular, it is important to involve human resources and your legal department in the development of an incentive program to ensure that the program complies with all tax, state and federal regulations.
How does an organization go about implementing the incentive design?

When implementing an incentive program, it is important to communicate, communicate, and communicate.

Let your employees know about the exciting benefit. Educate them on why it is valuable to both the organization and its employees (e.g., financial, health, etc). Provide specific details about who is eligible, how it works, length of time until employee receives the incentive (e.g., once criteria are met), how employee will receive the incentive and who to contact regarding questions and/or concerns.

Use existing forums that work well in your organization. Whether on-line/intranet, newsletters, video clips, bulletin boards, email, hard copy or company meetings, it is important to provide information about the incentive and wellness activities, leading up to and once implemented.

Once the program has begun, co-worker testimonials can provide powerful validation to the effectiveness of healthy lifestyles via the same modes of communication used to announce the program. Keep the program forefront and celebrate and share successful outcomes (e.g., participation rates, improved health, weight lost, etc.). Hearing about others’ successes is a powerful motivator for many and can help your participation and engagement as well.

Ensure you are creating a program that will be viewed positively. Identify site champions—staff who can help promote the program—and encourage participation.
With health care costs accounting for an increasingly larger portion of business expenses, many firms are finding that wellness programs can help drive down health care spending. A Towers Watson study conducted in 2011 reported that 39 percent of employers surveyed plan to develop or expand healthy lifestyle activities in the upcoming year.

According to the California HealthCare Foundation (CHCF), overall health care spending in the United States reached $2.49 trillion in 2009 and is expected to total $2.7 trillion in 2011. By 2019, national health spending is projected to climb to 19.6 percent of gross domestic product. In 2009, private businesses accounted for 21 percent of overall health care spending.

On average, companies spent eight percent of their total compensation on health expenses in 2009. That year, private businesses spent approximately $518 billion on health care, with $398 billion on private health insurance alone.

These rising costs highlight the importance of finding ways to decrease health care expenses and reduce the burden on business budgets. To that end, research now suggests that companies willing to spend on wellness programs for their employees can ultimately reduce their health care expenditures. Incentives can play a role in reducing health costs, but they also can add to expenditures as well.

The figure below demonstrates the interaction between incentive design and budget.

What aspects of financial incentives are important to understand?

Long-term, internal motivation is needed for sustained behavior change. Incentives can provide some of the additional (i.e. extrinsic) motivational support required to obtain a positive financial and health return for the organization and the individual. In addition, there is mounting evidence that supports using multiple strategies, including financial values, variety of incentive types, creating a worksite culture of health, and implementing a comprehensive communications strategy, not surprising given the diverse populations many organizations serve.

Financial incentives include cash, cash contributions to health care-related spending accounts, and reimbursements for wellness classes, nutrition support, smoking cessation, etc. Forrester Research found that financial incentives can encourage participation in a health improvement program. Further, analyses of interventions have shown that financial incentives (e.g., vouchers contingent on abstinence and related behaviors) can improve outcomes. The effects are also larger the greater the monetary value and the closer in time the incentive is given to the measurement of the targeted behavior. According to a 2011 study by Fidelity Investments, total financial investment in wellness incentives accounts for roughly two percent of an employers’ medical spend. This study also found that larger employers tend to provide greater incentives and see greater results than employers with fewer than 5,000 employees. The average employee incentive is $430. When an employer is considering a financial incentive they must also consider the short- and long-term budget implications for that incentive. Several budget considerations include:

- **Cost-neutral Approaches**
  
  With the recent economic downturn, financial incentives may not be affordable for all organizations. Other types of incentives can effectively support certain objectives, particularly when there is a strong culture of health and nonparticipation would be uncomfortable or outside of the norm. Public recognition works well with certain types of workforces (e.g., sales organizations, medical professionals, white-collar and volunteer positions). Requiring compliance or detailing ways in which one’s job or benefits depend upon participation is yet another alternative.
Another issue companies need to consider when designing incentive programs is whether they want to incentivize positive behavior (carrots) or penalize negative behavior (sticks). Sticks, while unpopular, can drive participation and ultimately behavior change. When using negative consequences in plan design, it is important that the organization clearly communicates with participants what they need to do to avoid the consequence.

- **Cost-benefit Analysis**

Justifying the expense of incentives to key leadership in the organization often requires a business case that includes level of participation, achievement of certain results, or both. If participation is incented, individuals may participate only to get the reward. If results are incented, they may be focused on achieving lifestyle changes. In addition, employees may need additional support to achieve the required outcomes. In an environment where it is important to tie value to healthy living and the cost of health care, and where ease of use and effectiveness are key, incentives customized to the population and employer goals will be required.

**How can wellness incentives reduce health care costs (by industry market trends)?**

A new report from health care consultancy The Vitality Group explores the effects of the world’s largest incentive-based health program, examining results for 300,000 participants over a five-year period. According to The Vitality Group’s findings, wellness programs resulted in a 23 percent increase in the number of participants who used a gym one or more times a week. The number of people who joined a gym but were “inactive” also decreased by eight percent over time, while there was an increase in the number of “medium- and high-engaged” members.

Moreover, participants who showed higher engagement in fitness activities also had a 16 percent decline in hospital admission and treatment costs, while those who went from “inactive” to “active” yielded a six percent cost reduction.

They concluded that there is compelling evidence that effectively designed incentive programs can motivate people to change their behaviors, leading to better health outcomes and lower health care costs over the long term.

Even modest efforts toward improving employee health can yield major cost benefits. According to risk management firm Aon Hewitt, every $1 spent on an employer-based wellness program can generate a $3 to $6 return on investment, usually two or more years after investment.

Aon Hewitt’s analysis of 42 published studies found an average $5.93 to $1 savings-to-cost ratio derived from wellness programs, along with an average 28 percent reduction in work absenteeism due to illness, a 26 percent reduction in health costs and a 30 percent drop in workers’ compensation and disability claims costs.

Employers are beginning to rely more on employees to stem the tide of rising health care costs, but the inability to motivate and change habits has prompted concern, according to Aon Hewitt.

“Wellness programs not only improve an individual’s short-term and long-term health, but they also help curb absenteeism and presenteeism, improve productivity and aid quicker return to work for employees on disability leave,” the company explained in an announcement of the findings. “Companies also offer wellness programs to remain competitive in the marketplace and as a recruitment and retention benefit.”

**What are current industry trends for rewarding and penalizing participants?**

The Aon Hewitt survey also showed that 22 percent of employers will have programs in place by the end of 2011 to reward participants for achieving specific health outcomes, and 10 percent will have similar programs to penalize participants for exhibiting unhealthy behavior. However, by 2016, 64 percent of organizations said they will add programs that reward for good health, while 46 percent said they will add programs that penalize for unhealthy outcomes.

Respondents currently offer incentives to employees for participation in key initiatives, such as biometric screenings (33 percent), health risk assessments (33 percent), wellness programs (31 percent) and tobacco cessation programs (27 percent). Conversely, some employers are imposing a penalty for non-participation in biometric screenings (5 percent), health risk assessments (5 percent), wellness programs (2 percent) and tobacco cessation programs (6 percent).
Money serves as the primary incentive and penalty these employers use to promote employee participation in key programs, including health risk assessments (66 percent have a monetary incentive; 9 percent have a monetary penalty); biometric screenings (65 percent have a monetary incentive; 8 percent have a monetary penalty); disease/condition management (54 percent have a monetary incentive; 9 percent have a monetary penalty); and wellness programs (59 percent have a monetary incentive; 6 percent have a monetary penalty).

“In a challenging economy, organizations are using financial incentives, as a mix of rewards and penalties, to motivate behavior change,” said Jennifer Boehm, principal in the Aon Hewitt Health & Benefits Practice, and a project leader for the survey. “However, leading employers also recognize that success requires more than just dollars; those organizations also focus on marketing health improvement services, eliminating barriers to needed care and measuring the impact of specific interventions.”
**What is an organizational culture?**

Organizational culture is defined as “the specific collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization.” It is widely agreed that the organizational culture in turn will affect the behaviors of the members of that culture.

**Why do organizations want to change their culture and how long does it take?**

Generally, for organizational culture change to be considered, a significant event must occur, an event that dramatically changes the world in which that culture operates. A paper presented at the International Atomic Energy Agency listed six potential reasons why organizations would want to change their culture:

1. Circumstances change.
2. Stakeholder expectations change.
3. Demographics of the organization change.
4. Organization’s objectives change.
5. New technologies are deployed.
6. Ingrained attitudes are producing negative outcomes.

There are four major steps involved in changing an organization’s culture:

1. Assess and understand the current culture, or the way things are now.
2. Define strategic direction, and what success looks like.
3. Create plans to achieve the desired organizational culture.
4. Finally, the individuals in the organization must decide to change their behavior to create the desired organizational culture. This is the hardest step in culture change.

Once the decision is made to change the norms, the process can take anywhere from five to 10 years to complete.

**Case in Point: What can employers do to foster a culture of health?**

- Ensure that senior management is seen as involved in health improvement personally;
- Foster teams that work together on health issues (‘walking clubs’ that log a mile or two during lunch break and add up the miles to a destination, competing with another group or company division);
- Challenge and encourage food service staff or vendors to provide healthier cafeteria food options, and/or subsidizing healthier food choices;
- Encourage participation in community events such as farmers markets, walks/races for cancer or diabetes; and/or
- Share testimonials from employees willing to tell others about their health improvement successes.

**Can incentives impact organizational culture?**

Incentives can be effective, but not as a stand-alone option. Senior management commitment and programs to foster new beliefs and values are just as, if not more, important. Additionally, the incentive must be appropriate for the culture and environment. For example, a gym membership discount is not likely to be effective if the respective gyms are only convenient to a small portion of the employee population. Diversifying incentives will support and enhance their overall effectiveness, especially for providing extrinsic motivation to get started with healthy behaviors.

How often is the success of a wellness program hindered by the actions of one or two leaders in an organization? A core objective to building a successful wellness program is senior level buy-in. But what happens if these senior officers, directors, department managers leave an organization or change roles? In most circumstances the efforts and progress of a wellness program or committee may have severe drop-offs or lag in engagement and/or outcomes. Regardless of specific impact, momentum can suffer. One strategy that has been successful in engagement and participation efforts has been providing incentives for key employees or employee champions.

Wellness champions have been receiving more recognition as drivers of engagement for wellness initiatives. These individuals serve many key roles of influence in the workplace and are loosely defined as employees who encourage participation, and distribute or collect information or resources. They may have made significant lifestyle changes to their own health and well being. Generally, these individuals may serve on a wellness committee or in a first aid responder role and are provided with some training on how to be champions/cheerleaders and encourage others at the site to become engaged. In addition, they may participate with site leads, vendors or management in determining incentives or focus of the program, but are not responsible for the final decisions.
The Social Cognitive Theory states that individuals possess self-beliefs that enable them to exercise a measure of control over their thoughts, feelings, and actions; that “what people think, believe, and feel affects how they behave.” This theory can be applied to the concept of wellness champions because people can work together on shared beliefs about their capabilities and common aspirations to better their lives.

Wellness champions can become a dynamic network of influence and impact culture by “leading by example,” promoting the goals of the program and providing peer support. In a sense, wellness champions create a culture of wellness organically within an organization. To create an organic growth for a norm of reciprocity, this dictates that we treat others as they have treated us. The norm of reciprocity is often used as a compliance strategy in social influence that is vital to the success of developing and achieving shared aspirations and effective commitment to an organization.

Implementing incentives for a wellness culture may include social recognition, time away from the worksite to work on wellness program initiatives and additional job training to equip these wellness champions to adopt new skill sets to produce the desired outcomes of culture shift. Training may include aspects of marketing, psychology, and lifestyle behavior change. These duties could be written into job descriptions or evaluations for promotions. In this way a culture of health grows organically and is complementary to senior leader endorsement and wellness program initiatives. Wellness champions bring vitality to the organizational morale and increase perceptions of organizational support.

In January 2011, the National Business Group on Health (NBGH) and Fidelity Investments surveyed 147 employers and found that 40 percent of employers measured used wellness champions as a method of communication/education to increase engagement levels. They rated second in perceived value behind printed mailings. Of all communication management channels evaluated, the presence of wellness champions was the only category that wasn’t measured in the previous year.

The concept of a wellness champion needs more research and evaluation. They are usually not paid for this role but may receive incentives or rewards for being champions. Considering a more strategic approach to identifying and recognizing these individuals may become important for sustainability and perception within an organization.

How do I assess what incentives may be effective in my organization?

Incentives can form the basis for the development of intrinsically oriented behavior. Once people have become engaged in the desired health behaviors, they can then learn, and internalize, their own perceived benefits. Considering aspects of self-determination theory, through integration, the regulation of behavior is assimilated into one’s core sense of self. As a result, the behavior becomes self-determined, and can be maintained primarily by intrinsic motivators. By using incentives to initially engage employees in learning and to initiate new behaviors, they can experience for themselves the personal benefits of the activities. Then, they can recognize primarily intrinsic values that will motivate continuing behavior.

The first component of assessing the potential effectiveness of an incentive is thorough observation. The questions that could be asked are endless, but the first thing to do is observe the population for clues as to the type of incentive that would be most meaningful to the population you are attempting to encourage to change.

- What do you see in your organization?
- What is the physical layout of the company? Are stairwells used?
- Are common meeting areas utilized?
- How often do you see colleagues chatting?
- Is the campus non-smoking?
- Are there bicycle racks?
- Do colleagues enjoy activities outside of work?
- If you have a cafeteria, what are the biggest sellers? Are healthy foods sold? Are calories and nutritional information displayed?
- What hours do most people work?
- Are colleagues in offices or do they work from home?
- What is the age distribution of your population?

Another approach is to have small employee focus groups and gather information directly from employees regarding their interests and the programs and/or initiatives they would like the organization to offer. This is also an opportunity to directly obtain suggestions on what incentives would be received positively. An organizational survey or web-based
survey are also less direct methods for acquiring similar information. The advantage to these methods is the higher response rate.

In addition, there are tools and surveys available that can assess the current organizational culture of employers. These surveys can be categorized as either internal or external assessments. Several of these surveys can be found on the Internet for free. Examples are listed below:

- **Internal Assessment**
  Perceived Organizational Support (POS) tools can be used to evaluate the employees’ perspectives on the organization and their willingness toward supporting organizational initiatives: http://www.psychology.uh.edu/pos/questionnaires.asp

- **External Assessment**
  The Health Enhancement Research Organization (HERO) Employee Health Management (EHM) Scorecard helps organizations learn about EHM practices and discover opportunities to improve their programs and measure progress over time: http://www.the-hero.org/scorecard_folder/scorecard.htm

- **Additional Surveys**
  Literature searches specifically aimed at an organization’s industry are also helpful. For example, a review was done on the available instruments to assess organizational culture in the health services industry. This review focused on 13 instruments that examined items such as leadership, management style, prioritization of goals, and employee opinion of organization. Several of the tools reviewed with respect to health service industries include:
  a. Competing Values Framework
  b. Quality Improvement Implementation Survey
  c. Organizational Culture Inventory
  d. Harrison’s Organizational Ideology Questionnaire
  e. Hospital Culture Questionnaire
  f. Nursing Unit Cultural Assessment Tool
  g. Practice Culture Questionnaire
  h. MacKenzie’s Culture Questionnaire
  i. Survey of Organizational Culture
  j. Checklist of Health Promotion Environments at Worksites Survey (CHEW)
What is meant by intrinsic and extrinsic motivation?
Intrinsic motivation is derived from the beliefs, values and interests of the individual. This motivation comes from inside an individual, such as valuing health and longevity. The motivation comes from the pleasure one gets from the task itself or from the sense of satisfaction in completing or even working on a task. An intrinsically motivated person will engage in health-enhancing behaviors because they may find it enjoyable, or the end result of better health provides a sense of pleasure. The person does not engage in the healthy behavior because there is some reward involved, such as a prize, or payment, but for their own inherent satisfaction. Intrinsic motivation does not mean, however, that a person will not seek rewards. It means only that such external rewards are not enough to keep a person motivated. Furthermore, motivation is action/behavior-specific—an individual may require external motivation to do one thing, where another thing may offer strong intrinsic rewards.

Extrinsic motivation is derived from external sources of gratification, recognition or satisfaction. This type of motivation comes from outside an individual. The motivating factors are external, such as premium reductions, cash payments, or gifts based on results and/or performance. These rewards provide satisfaction and pleasure that the task itself may not provide. An extrinsically motivated person will engage in health-enhancing behaviors even when they have little interest because of the anticipated satisfaction they will get from the reward. For example, an extrinsically motivated person who dislikes exercising may work out at the gym because of a reward for doing so. Extrinsic motivation does not mean, however, that a person will not get any pleasure from working out or completing a series of exercises. It just means that the pleasure they anticipate from some external reward will continue to be a motivator even when the task to be done holds little or no interest.

What does an organization need to understand about both intrinsic and extrinsic motivation when developing an incentive program?
Regardless of a person’s motivational center, the benefit must outweigh the cost of change—will doing this be worth it to me? Benefits can be very personal (e.g., ability to walk a mile without feeling breathless) or quite external (e.g., ability to participate in a company softball game), and without a solid understanding of the value proposition and its likelihood of achievement with an incentive, an organization may well be wasting its time and resources.
Appealing to both intrinsic and extrinsic motivation will likely yield the best result from an incentive program. Understanding the type and amount or value of an incentive to provide will also help in sustaining the desired result. While an extrinsic reward may help to motivate someone to make an initial change, long-term behavior modification must also be intrinsically motivated.

Everyone is faced with engaging in incentive programs in current everyday life—coffee shops, gas stations, nail salons, oil change centers. The question becomes what about an incentive can both motivate and reward behaviors a person is looking for (e.g., change in lifestyle, participation, etc.), and can this incentive compete above and beyond the other opportunities for attention and behavior change that confront people every day?

To make it yet more complicated, intrinsic motivators are unique to the individual, may be unique to population segments (e.g., mothers, grandparents, African Americans, single parents, etc.), and require a much stronger ability to listen, understand, appreciate and a willingness to address on the part of the organization in order to deliver them. Motivational interviewing, readiness to change/willingness to participate and/or other measures of activation are required to assess intrinsic motivation drivers. Available support tools vary from personal conversations/interviews, standardized or home-grown tools, focus groups and more labor/cost-intensive marketing, social marketing and attitudinal research methods.

Case in point: High fat/comfort food-eating as a stress reliever
Eating comfort foods is seen as a stress-reliever for many people and provides an immediate, but short-term, benefit to an individual. Conversely, to lose weight, the fattening foods must be avoided. The benefit of weight loss must be seen as more desirable than the taste of the food and the stress-reduction provided at the moment it is consumed. A desire to be thinner and healthier may be the intrinsic reward. Providing a monetary incentive may help motivate an individual during the stressful times when they would normally seek out fattening food. As weight loss occurs, this may evolve to an intrinsic reward in that the sensation of being thinner and wearing smaller sizes or different clothing may feel better than the fattening food. The change in behavior can then be perceived as worth the effort.
What types of motivation do most incentive programs address?

The type of motivation depends upon the intended behavior change, and the “cost/benefit ratio” of that behavior change. Incentive programs are most successful when employing both intrinsic and extrinsic motivation. Long-standing and sustained behavior change may be initiated from an extrinsic center but will require intrinsic motivation for the long term.

Key considerations for the development of incentives to motivate may include:

- Incentive-related needs and expectations evolve as the consumer’s needs and interests change. What was important yesterday may not be important next month. Organizations should consider methods, on an individual as well as a segment basis, to identify when an incentive program is no longer effective, or effective enough to move the needle, either on initial predications or a sustained change.

- Examining how intrinsic rewards can be triggered is essential. A blue-collar manufacturing group will likely not respond in the same way as a white-collar salaried team to external motivators that can help create intrinsic motivation. Therefore the incentive must be crafted considering the population segment.

- Extrinsic rewards should be blended with personal motivational opportunities to encourage not only participation but active engagement, which ultimately leads to lasting healthy behavior change.

If an organization implements an incentive, will it need to increase every year?

The short answer is that incentives will very likely need to evolve year after year. The old adage—“don’t mess with success”—applies to health incentives programs too, at least for a period of time. As a society, we are becoming far less willing to participate in the “same old thing” and are driven to quick returns, fast responses, and ever-evolving and changing stimuli; so anticipate some need to change incentives on some frequency.

Extrinsic motivation is often effective initially or to motivate an individual for a one-time event such as completing an HRA. However, it may focus people on the reward and not the action. Stop giving the reward and participants may stop the behavior. Fostering a culture of health may help grow intrinsic motivation which is required for longer term activation in health. Employees who feel that their participation in healthy behaviors is not isolated will be more likely to continue with maintaining tobacco abstinence, healthy eating, exercising, etc. A sense of shared goals among employees and ongoing social support from peers may help take the place of monetary rewards that have not increased over prior years.

Remember:

- A change doesn’t necessarily require an increase in monetary value, rather it could be adding benefits that are minimal or no cost to the organization. Time away from work, group parties, and other low/no cost options can be extrinsic or intrinsic motivators that are effective for your group.

- For companies with significantly limited funding, offering a “bake-off”-like approach in the initial years can provide insight into the employee/dependent segments and what’s attractive to them. Consider offering an option of two incentives, allowing a choice between them to guide your future decisions, and consider the design and implementation of the program to be shared opportunity between the company, its vendor (if appropriate) and a representative group of employees.

- It is likely that at least incremental value increases (as perceived by employees/participants) will be required to sustain interest, participation and outcomes.

A bake-off is a research process or proof of concept in which competing options are compared and the best product or service is selected. From technopedia: http://www.techopedia.com/definition/4232/bake-off
Incentives have been shown by research to be one of the “three pillars” of engagement in population health programs, with the other two pillars being organizational culture and communications. Incentives can be a double-edged sword that must be used carefully and skillfully to avoid establishing an entitlement culture or dependence on external “pay-to-play” contingencies rather than increasing internal motivation to become healthier.

**Effectiveness of Cultural Norms in Building Engagement**

An essential element in achieving and maintaining population health is establishing a normative “culture of health” in an organization. The strongest foundation for achieving a culture of health is leadership that establishes health as a core business value. Strong leadership support is the “key that opens all doors” to creating a culture of health that cuts across organizational policies and benefits, management practices, work environment, and organizational climate. The power of culture in driving health both positively and negatively is shown clearly in obesity rates that have more than doubled in the past several decades due largely to cultural factors and smoking rates that have been cut in half during approximately the same time period. While incentives are often important elements, especially in the short term, healthy culture is one of the most essential long-term strategies for successful population health management.

**Can an employer’s cultural norms related to health be as effective as traditional incentives?**

It remains unclear whether incentives are as effective or cost-effective in the long term when compared to initiatives focused on an employer’s culture and/or environment. A small number of studies specifically suggest that increasing participation (attendance) in a program is relatively simple, but the role of incentives in changing behavior in sustainable ways is less clear.

Although a positive, curvilinear relationship has been demonstrated between incentive size (i.e., value) and health assessment participation, further analysis demonstrated that a supportive culture and strong adjunctive communications greatly increase the cost-effectiveness of a wide range of incentive values. This research suggests that incentives, communications, and culture were all positively related to increased participation in health assessments, and communications and culture predicted even greater participation when combined with incentives. Therefore, each is a vital and necessary pillar related to engagement. Culture was the tallest pillar, followed by communications then incentives.

Other studies have also shown the interaction between organizational factors and the use of incentives. For example, a cross-sectional study by Taitel et al. was designed to investigate factors associated with employee participation rates in health risk assessments. The study used multiple regression analysis to assess data from 124 employers. The researchers found that the value of the incentives, communications and the level of organizational commitment were the strongest predictors of health assessment completion rates. This study specifically demonstrated that to achieve a 50 percent health assessment completion rate, employers with low levels of organizational commitment or weak communications would need an incentive value of approximately $120 compared to the $40 to achieve this same rate of participation if strong commitment and communications were in place.

A similar study by Wilhide was conducted on a sample of 87 employers and showed incentives paired with a wide variety of communications strategies produced the greatest participation levels. Larger incentives led to higher participation, but “high blast” repeated emails and communications tactics such as health fairs “played a significant role” in both program participation and completion. While financial incentives combined with other strategies can lead to strong participation, money alone can also drive participation. Nyce and colleagues showed that completion rates for employee health assessments or biometrics screenings increased by nearly 11 percentage points per each $100 increase in financial incentives and reached universal participation at a $600 incentive.

**Can a population health management strategy be effective without the use of incentives?**

Well-designed incentive strategies can be useful “catalysts” for accelerating participant engagement, but incentives alone are not the final solution. Nor should employers rely on incentives as their primary long-term population health behavior change catalyst. Communications and culture are equally important for driving engagement in the short term and may be more important for achieving sustained population health engagement and outcomes in the long term. In order for an incentive to fully achieve its desired effect, it must be communicated skillfully to position the incentive and program positively while simultaneously avoiding a “pay-to-play” mentality. A long-term communication strategy is essential to accomplishing these objectives, with the primary immediate goal of communications to assure widespread program awareness and engagement, and the primary long-term goal to...
increase the “value of health” across the population. The essential end game in achieving and maintaining population health is establishing a “culture of health” across the entire organization.

The strongest foundation for achieving a culture of health is senior employer leadership that establishes health as a core business value. Employers are beginning to recognize that health is not just a “cost” to the enterprise that must be controlled but rather that health is a strategic asset in achieving improved productivity and a sustained competitive advantage. Strong senior leadership support is key to creating a culture of health that cuts across organizational policies and benefits, management practices, work environment, and organizational climate.

The power of culture in driving health both positively and negatively is shown clearly in obesity rates that have more than doubled in the past several decades due largely to cultural factors and smoking rates that have been cut in half during approximately the same time period. A healthy culture is the most essential long-term strategy for positive population health outcomes.

The Dow Chemical Company is an example of an effective health management strategy without the use of incentives. In 2008, Dow Chemical’s program was awarded the National Business Group on Health’s (NGBH) Platinum Award for Best Employers for Healthy Lifestyles. In its award summary, NGBH noted the following strategic elements of Dow’s program:
- Prevention,
- Quality Care,
- Management, and
- Advocacy.

In the absence of incentives, Dow was able to show a $3.21 savings for every dollar invested on their health management program. “Dow strives to create a corporate culture and environment in which there is a shared responsibility between the employees, their supervisors and the company for the health of all of Dow’s people.”

Incenting for Health Outcomes

What are “outcomes-based” incentives?
Incentives have typically been participation-based and applied to completion of specific activities such as health assessment completion, participation in onsite biometric screenings or behavior change program participation or completion. Outcomes-based incentives differ in that the incentive (i.e., reward/penalty) is attached to achievement of specific health status factor(s) such as target blood pressure levels, cholesterol levels or body mass index.

Why are employers considering the use of outcomes-based incentives?
Use of incentives for “simple” behavior changes or activity participation has grown significantly over the past decade; however, incentives for more complex, long-term behaviors has grown more slowly during this time. Very few employers tied incentives to the achievement of health standards in 2007 through wellness program participation. More employers are considering the use out outcomes-based incentives where financial rewards are tied to whether employees are within health ranges on biometric measures such as blood pressure, lipids and/or body mass index.”
This type of incentive model is attractive to some employers because they believe it will increase personal responsibility and accountability for health by requiring individuals to achieve an outcomes-based health standard or an agreed-upon “reasonable alternative standard” to qualify for the incentive. More employers are expecting their employees to bear more of the financial cost of unhealthy choices and hope this model will motivate employees to become healthier and/or stay healthy.

As they are asking more responsibility of their employees, more employers recognize their shared responsibility is to create a healthy work culture and environment for employees. For example, a recent report released by Towers Watson showed that organizations most effective at controlling health care costs also offered significantly healthier food options in cafeteria/vending machines compared to those organizations that were less likely to offer healthier food options (69 percent versus 39 percent, respectively).

Will outcomes-based incentives result in greater overall engagement and health improvement compared to more traditional incentive strategies?

Research demonstrates that incentives are highly effective at building participation but questions remain as to the overall role and impact of incentives on long-term behavior change. Behavior economic theory posits that people tend to work to the point that triggers the reward and no further. And over time, larger rewards to achieve the same effect may be required.

With regard to outcomes-based incentives, practice is significantly ahead of research and little is understood about both the short-term and long-term impact of outcomes-based incentive strategies. For example, if the key drivers of change on an individual level require intrinsic and extrinsic motivation, then outcomes-based incentives may not be enough to initiate and maintain behavior change. Extrinsic rewards can drive participation while intrinsic values drive longer term, sustainable change. The key to improvement in health outcomes is to support healthy lifestyle change through a combination of external and intrinsic motivational programs.

What are some of the potential consequences (intended and unintended) of implementing an outcomes-based incentives strategy?

Incentives strategies based on achievement of health status targets have gained a great deal of media attention. Despite their appeal, several factors have been identified that argue against exclusive use of outcomes-based incentive strategies for increased engagement and health improvements at the population level.

Administratively, it is essential that an incentive strategy based on meeting health goals be in compliance with regulations. Execution of such strategies must be approached thoughtfully to avoid potential legal issues.

Organizations such as the American Heart Association generally support the use of incentives for participation in worksite health management programs but oppose holding employees accountable for achievement of health status outcomes. Concerns have been expressed about the lack of consumer protections to prevent financially penalizing individuals with pre-existing conditions. Additional concern has been raised about the potential for such strategies to lead to medical underwriting. Health status is the result of lifestyle as well as genetic and physiological factors; thus a single approach to addressing lifestyle changes is not likely to work for an entire population. Additionally, demographic, access to health care, environmental and socio-economic factors also influence a person’s ability to achieve certain outcomes. Limiting rewards only to those who meet the outcome targets risks alienating those at highest risk.

Concerns have also been expressed that an outcomes-based model may fail to motivate many people who believe they cannot realistically achieve the outcomes even though they do not have an identified medical condition. Not only could this adversely impact individual motivation but also foster a negative perception about an employer’s health management program.

Rewarding health outcomes has potential merits, but researchers and practitioners in the industry emphasize the importance of considering all factors, as described above, when designing incentive strategies. One approach that has been advocated is a “progress-based” incentive strategy which is theorized to provide “a safer, more effective, participant-centered and equitable approach to achieving population health goals.” This model allows all individuals the opportunity to earn incentives regardless of where they start in relation to established health standards.
**Is there a standard approach to implementing an outcomes-based incentives strategy?**

Recent health care legislation and regulations, including the Patient Protection and Affordable Care Act and HIPAA, offer guidelines for the appropriate use of wellness incentives.\(^{47,48}\) It is important for employers to consult with their legal counsel prior to implementing an outcomes-based incentives strategy.

There is no current standard approach to implementing outcomes-based incentives. There are widely varied perspectives on incentives across the industry, ranging from endorsement of incentives for health outcomes only, endorsement of incentives for participation, and endorsement of no financial incentives. Alternative models have been introduced including the concept of “progress-based” incentives as a potential middle-ground where incentives would be awarded to individuals who either meet a health standard or who make progress toward that standard as a reasonable alternative.\(^{46}\) Ultimately the decision regarding the best approach to use must be made by the employer based on knowledge of their workforce.

**What does the peer-reviewed literature tell us about the effectiveness of outcomes-based incentives?**

There is limited evidence on the efficacy and long-term impact of outcomes-based incentives in the published, peer-reviewed literature, and most of the research available is focused on smoking cessation or weight loss. Research suggests that there are some positive-impact, outcomes-based, incentive strategies; however, this is an example of where practice is far ahead of the research. The following references explore the effectiveness of these strategies:


- Finkelstein EA, Linnan LA, Tate DF, Birken BE. A pilot study testing the effect of different levels of financial incentives on weight loss among overweight employees. J Occup Environ Med, 2007;49(9):981-989.


### Application of Behavioral Economic Principles

**What are the principles of behavioral economics?**

Behavioral economics uses social, cognitive and emotional factors to explore and understand an individual’s economic decisions focusing primarily on the relationship between rational and actual decisions.

**How do these principles apply to incentives for population health management programs?**

The work of behavioral economists has had a significant positive influence on the field of population health management. One area where principles of behavioral economics are apparent is in efforts to create worksites “where the healthy choices are the easy choices.” Examples of such efforts may include an environment where healthy food options are available in the workplace and are offered at a reduced cost compared to less healthy options; flexible scheduling is supported by leadership and made available to employees to take breaks throughout the course of a workday to accommodate health and well-being needs. There is a long-standing awareness of the influence that interpersonal and physical environments have on behaviors and that behavior, in turn, can shape the environment. Behavioral economists have built on these well-established concepts by showing how economic policies can influence behavioral choices.

Behavioral economics has also influenced the application of monetary and non-monetary incentives that “nudge” people in socially-valued directions; research in this field is growing.\(^{48}\) A recent randomized trial tested the differential impact of two forms of incentives in achieving a goal weight loss of 16 pounds over 16 weeks.\(^{10}\) One incentive was a lottery where participants could earn daily rewards of $10 to $100 based on their weight loss achievements. The other involved participants’ investment of their own money where they could ultimately earn as little as $0 but up to $252 per month depending on their attainment of weight loss goals and the amount they had initially invested. While about half of those in both incentive groups achieved the 16-pound weight loss goal after 16 weeks compared to only 10 percent of those in the control groups, these differences were not statistically significant.
Other studies have suggested that avoiding a loss may actually be a more powerful motivator than seeking a gain.⁴⁹,⁵⁰ People tend to prefer avoiding losses than to acquiring gains. Loss aversion can produce inertia, e.g. sticking with the current situation. For instance, a person who loses $100 will lose more satisfaction than another person will gain satisfaction from a $100 windfall. Framing is important here. Would you rather get a $5 discount or avoid a $5 surcharge? There are many ways to phrase health-related issues to address loss aversion.

A growing interest in the principles of behavioral economics, such as those summarized so well in the book “Nudge,”⁵¹ “Drive”⁵² and “Predictably Irrational”⁵³ suggest that mechanisms to induce behavior change identified in behavioral economics are key to sustaining long-term behavioral change and warrant further testing within the context of employer incentive designs and well-being programs.
Why is it important to evaluate incentives?
Incentives in population health management can be a useful tool for encouraging consumers to adopt and maintain healthy behaviors. It is important that organizations administering incentives to a population incorporate an evaluation plan in order to: 1) determine whether the incentives are associated positively with the desired program goals (e.g., engagement, lower medical costs) and 2) quantify which incentives lead to the greatest favorable change.

What considerations are important to an evaluation plan?
Most wellness and care management program providers use an evaluation scheme that can be categorized as “pre-post with no control group” to evaluate their programs and related incentives. While there are many other study evaluation designs, the pre-post method is common for ongoing program evaluation although other designs are utilized as well. What this means is that the program provider takes an initial (pre-program) assessment of employees/plan members that may include health behaviors, health care utilization, and medical costs at the outset of a program. These assessments rely on data from HRAs as well as medical, facility, and pharmacy claims. These data form the baseline against which changes in health behaviors, utilization and costs will be measured.

After the program has been running for some period of time, such as 12 months, a “post” program assessment can be conducted among program participants and non-participants. This entails collecting the same type of information that was obtained at baseline, and comparing the two sets of measures. The presumption is that individuals will have changed their behaviors for the better and perhaps lowered their utilization of medical services, and potentially lowered the payer’s costs as well.

A post-assessment that is conducted on only those who choose to participate may introduce bias into a program evaluation design. The theory is that those who choose to participate in a health program might be more health-conscious and more highly motivated to get even healthier than the non-participants. If only participants are examined, the program evaluation will very likely show success. Those who fail to engage in the program need closer scrutiny in evaluation reports. They are likely the individuals who are driving up costs to begin with, i.e., those with long-standing lifestyle risks that have led to costly chronic conditions and who need help to change.

There are several methods that can be used to reduce the risk of bias in program evaluation results. These methods include the use of a comparison group as well as a retrospective evaluation design. Both of these methods are discussed below.

The addition of a comparison group is a strategy that can be used to control this bias. One such comparison method is the randomized control design. This entails randomly assigning individuals (or employer groups) to one of two groups: an “intervention group” or a “control group.” Everything else about the two groups ought to be exactly the same, creating a level playing field to assess only the effects of the intervention. The only difference would be whether individuals received the program (i.e., the “intervention”) or not (i.e., the “control.”) Any improvements in behavior or costs over time can be attributed to the program, because it was the only thing that was different between the two groups. Dr. Kevin Volpp and colleagues published a well designed randomized controlled trial on incentives.

Some plans or employers may be reluctant to withhold a program (or offer two different programs) from some of their employees/members. However, if the program proves successful, it can be offered to the others. The initial study period is a way to evaluate whether the program is actually helpful at all, before rolling it out to a full population.

While this is the ideal evaluation design, it may not be realistic for employers and health plans to withhold a program from some portion of their population, even for a short while. In those cases, an appropriate comparison population, such as their “book of business” outcomes or outcomes for other comparable plans or employers (comparable in terms of size, geographic location, age and gender distribution) should be used for the evaluation.

Another and less commonly applied approach is the use of a retrospective evaluation design, which employs examination of past data to try to identify what might account for changes in behavior or costs. For instance, claims data might be analyzed in relation to when a high-deductible plan was offered as an incentive to control costs to everyone in a population. One might find that costs increased more slowly after the high-deductible plan went into effect. This could lead to the erroneous conclusion that the benefit change was responsible for the cost savings. In fact, it could have been something else entirely, such as a change in physician practice patterns or the introduction of a new, lower-cost
technology for a medical procedure. Without the presence of a control group that was not offered the new, high-deductible plan, it’s impossible to know what led to a change.

Various types of analytic methods and modeling take place to adjust for bias in the final estimates, but even with these adjustments the confidence in the final result is not as strong as that derived from the prospective randomized study. However, utilizing retrospective studies for hypothesis generating is useful prior to testing the actual impact of the incentive prospectively with a control group.
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