

Engaging Employees in Wellness Programs

Leveraging Behavioral Economics Precepts

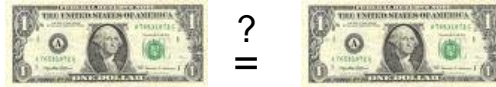
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May 27, 2010

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Behavioral Economics: Basic Ideas

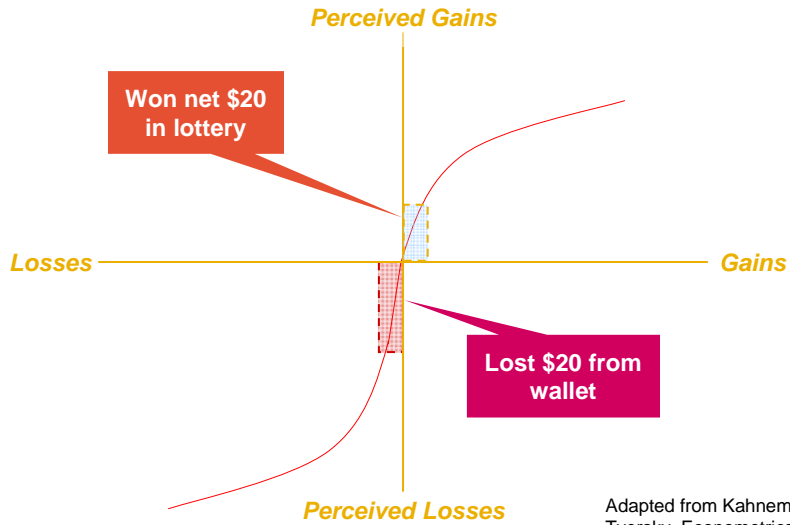


- **Assuming economic equivalence**
 - We hate losses more than we love gains
 - Small increments have more perceived importance
 - We like certainty better than uncertainty
 - We interpret economic gains or losses based on context
 - We underestimate the impact of randomness
 - We like what's already ours
 - We are overly optimistic
 - We insist on fairness
 - We prefer luxury goods to necessities
 - We remember good stories!

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Daniel Kahneman won the Nobel Prize in Economics (2002) for "Prospect Theory," showing that losses are more powerful than gains in our minds

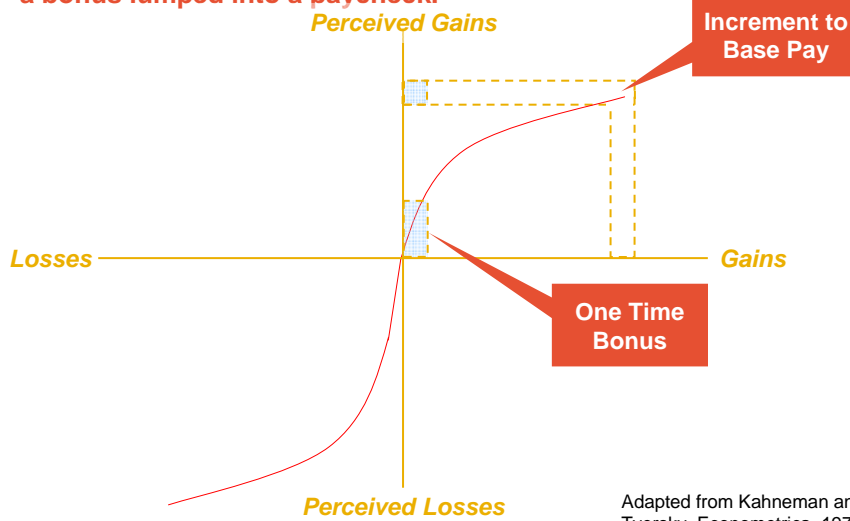


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Adapted from Kahneman and Tversky, *Econometrica*, 1979

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Prospect Theory also demonstrates that perception of a benefit is dependent on context. For instance, a one time SEPARATE bonus is valued more than a bonus lumped into a paycheck.



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Prospect Theory: Implications for Health Care

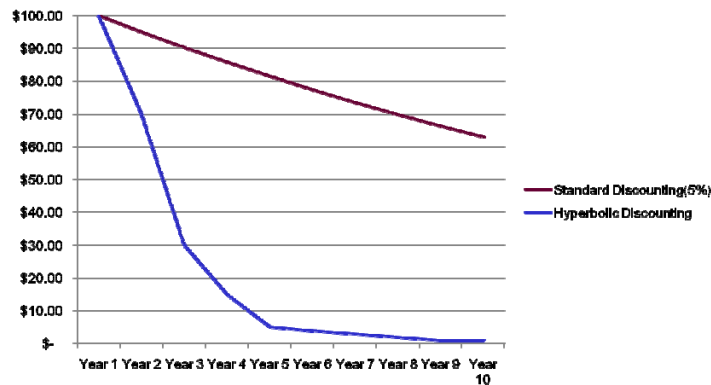
- “Sticks” motivate employees to engagement more than economically equivalent carrots
 - Penalties likely to get more attention than rewards
- Better to “bundle” unpopular things together
- Better to split up rewards so that each is recognized separately

Practical Application:

An employer wants employees to complete an HRA.

- Would \$100 added to a paycheck be more or less effective than a \$100 gift check given separately?

We “Over-Discount” Due to Future Uncertainty



We would prefer \$25 now to \$50 in a year, even though the Net Present Value of \$50 is \$47.50

Certainty: Impact on Health Care

- Employees will shy away from high deductible plan designs and cling to copay designs
 - Employees prefer to know the amount of their out-of-pocket exposure rather than feel “at risk” even when modeling tools show they are likely to do better in a HSA/HRA
- Randomization for experimental therapy very unpopular with patients
 - 1990s: 30,000 women who had bone marrow transplants for metastatic breast cancer; only 3% in randomized studies*!

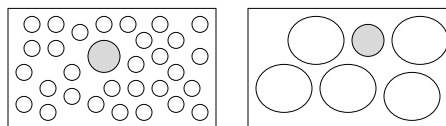
Practical Application:

When should incentives be paid?

* Source: New York Times, 2000
<http://query.nytimes.com/gst/fullpage.html?res=9903E0DE1231F935A25751C0A9669C8B63&sec=health&spn=&partner=permalink&exprod=permalink>
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Context Matters: Framing



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Context Matters: Framing



“Regular and original prices are offering prices only, and savings might not be based on actual sales. Some original prices not in effect during the past 90 days.”

Macy's Catalog
The fine print!

Framing and Health care

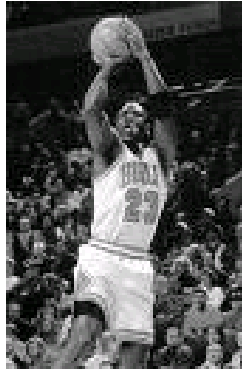
- An increase of \$5 in the cost of an expensive drug hurts less than an increase of \$5 in the cost of a cheap drug
- Employees more likely to accept benefit reductions in an ailing economy when the company has missed financial expectations
- Incremental health burden is better accepted by those who are already pretty sick
 - Patients close to death value each day of life more than those who are healthy
- 95% success rate seems great
 - 5% failure rate seems bad!

Practical Application:

How can benefit design make patients more likely to “price shop” for health care?

How difficult will it be to lower reimbursement for highly paid specialists?

Underestimation of Randomness



1991: Michael Jordan hit 6 of 9 three pointers in the first half of the first playoffs against Portland

2009: The majority of basketball fans continue to believe in the “hot hand”

In simulations, with a 27% 3-pointer hit rate, and 50,000 simulations, of 9 shots Jordan would hit

6/9: 700-800 times

7/9: 100-120 times

8/9: 10-12 times

9/9: 1-3 times

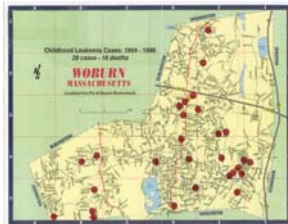
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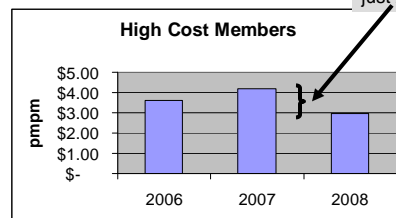
Impact of Randomness in Health Care



It's hard to ignore “cancer clusters” – but most represent random events



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We deeply want to believe that our medical management efforts make a difference. Sometimes, we overlook randomness as an explanation – especially in smaller groups

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Randomness

Practical Application:

Year to year variation in performance in “risk” contracts is often due to chance – not to specific programmatic efforts

Endowment Effect: “It’s Mine and I Love It”

- Outside of Health Care
 - We retain 401K mutual funds that hover at 1 star rating
 - Tickets to a Duke basketball game
 - Winners of a lottery wanted far more for their tickets than the lottery losers were willing to pay
- Within Health Care
 - Evidence of poor quality rarely leads to patients changing physicians or hospitals
 - Towers Watson consultants have found that 10-20% of employees will remain on an obviously actuarially disadvantaged health plan based on inertia alone

Practical Application:

How can employers be sure that employees don’t just stay with a ‘low value’ plan out of inertia?

Optimism

- We gamble because we think we'll win
 - Lottery tickets
 - Publisher's Clearinghouse



You Could Become A Millionaire!

Win \$10 Million!

Are you the winner we'll be looking for?
Enter now and you could become a millionaire! Don't wait!
Enter today and every day, because you never know which
entry could become the big winner!

[Begin »](#)



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Optimism and Health Care

- Most Americans don't purchase enough life insurance
- We continue to be sedentary, eat too many calories, and smoke too many cigarettes
- While those with health insurance over-purchase at open enrollment (endowment effect), those with no insurance would be more likely to under-purchase compared to their actual needs

Practical Application:

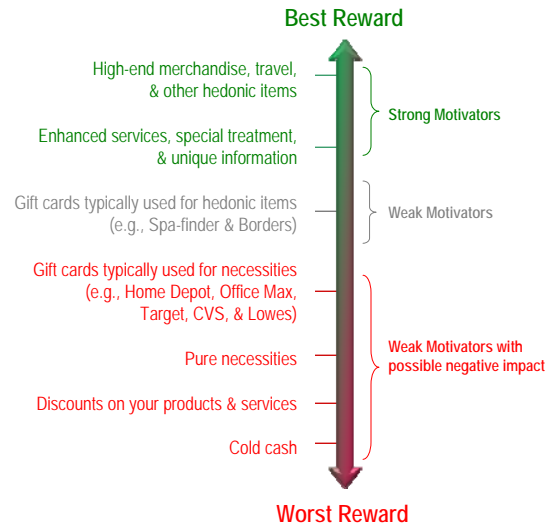
An employer has a budget of only \$15 per employee to encourage wellness in a 1000 person firm. How can the employer use ingrained optimism to get the largest impact from this \$15,000?

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When it Comes to Motivators, Cash is not King, and we prefer luxury goods to necessities

- In fact, studies show that “indulgent gifts” are a stronger motivator of change



Reward hierarchy developed by Professor Ran Kivetz, of Columbia Business School

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Fairness

- Classroom Psychology Experiment
 - You are given \$20, and have to split this with a classmate.
 - You choose how much to give her
 - If she accepts, you each get to keep your share
 - If she rejects, neither gets the money
 - If you offer *substantially* less than half, it's very likely both will leave the class empty-handed



Practical Applications:

Employers should be careful about differential benefits even if these are not prohibited by regulation

Overuse of “sticks” gets attention – but some of that attention can be counterproductive

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We Remember Stories

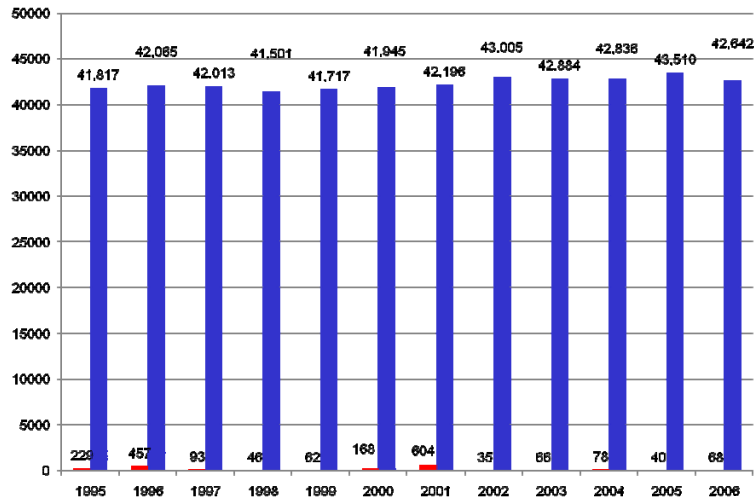


New York Police Department
 American Airlines Flight 587 crashed on Nov. 12, 2001, killing all 260 people on the plane
 and 5 people on the ground. The plane was bound for the Dominican Republic.

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The Likelihood of Dying in an Airplane is Tiny Compared to a Car



US Deaths. Source: North American Transportation Statistics
<http://nats.sct.gov.mx/nats/sys/tables.jsp?i=3&id=12>

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Anecdotes

Practical Application:

How can we use stories to encourage fewer medical errors and better processes within health care delivery?

How can we use stories to encourage healthier lifestyles?

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Behavioral Economics: Take Homes

	Rule	Brief Explanation	Implication
Rule One	Prospect Theory	We hate losses more than gains, and small <u>independent</u> losses or gains gain our attention	Offer separately identifiable rewards. Consider penalties in some instances
Rule Two	Discounting	We like certainty more than uncertainty	Make incentives as immediate as possible
Rule Three	Framing	We view economic losses or gains in context	Display a range of choices to highlight beneficial choice
Rule Four	Patterns	We underestimate the impact of randomness	Be skeptical about results that could be swayed by a few members
Rule Five	Endowment Effect	We like what is already ours	Be careful about takeaways. Set up "good" default option
Rule Six	Optimism	We overestimate our chance of success	Consider sweepstakes
Rule Seven	Luxury	We prefer items that appeal to our sense of indulgence	Cash is not king
Rule Eight	Fairness	We abhor anything that appears unfair	Be careful about penalties
Rule Nine	Availability	We are more motivated by stories than by statistics	Communication is critical

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Top Mistakes Employers Make in Deploying Incentives

- Overestimate importance of tax-efficiency to employees
- Bundle incentives into paycheck
- Schedule incentive payments too far after desired behavior
- Insist that incentive be used for health-related activity (as opposed to luxury)

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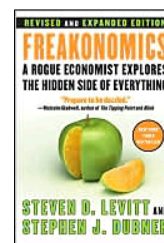
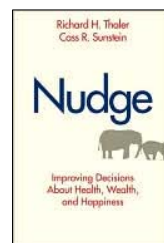
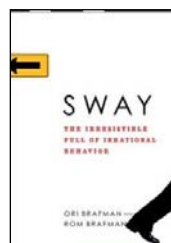
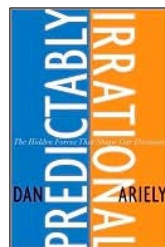
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Other Important Terms in Behavioral Economics

- Predictably Irrational
 - We can predict that we will act contrary to utilitarian economics (Ariely)
- Libertarian Paternalism
 - Use regulations to “nudge” people to make socially beneficial individual decisions (Thaler and Sunstein)
- Choice Architecture
 - Present a choice in a way that makes it more likely people will make the desired decision (Thaler and Sunstein)

Note that Cass Sunstein, co-author of Nudge, is now the Director of the Office of Information and Regulatory Affairs in the Obama administration.

Some Recent Books





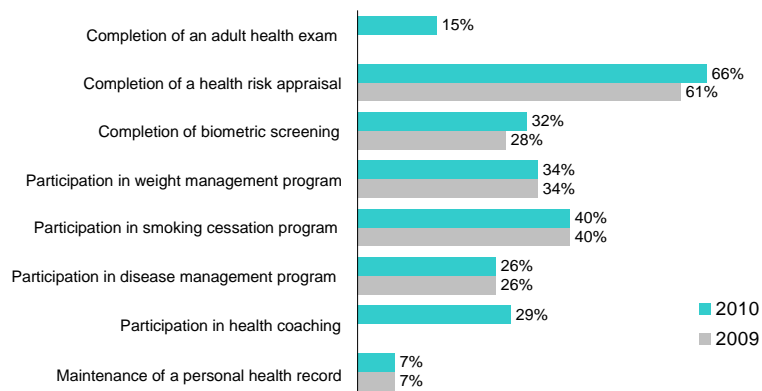
Appendix: Incentives

Detailed Findings from the 15th Annual Towers Watson/National Business Group on Health Survey on Purchasing Value in Health Care (2010)

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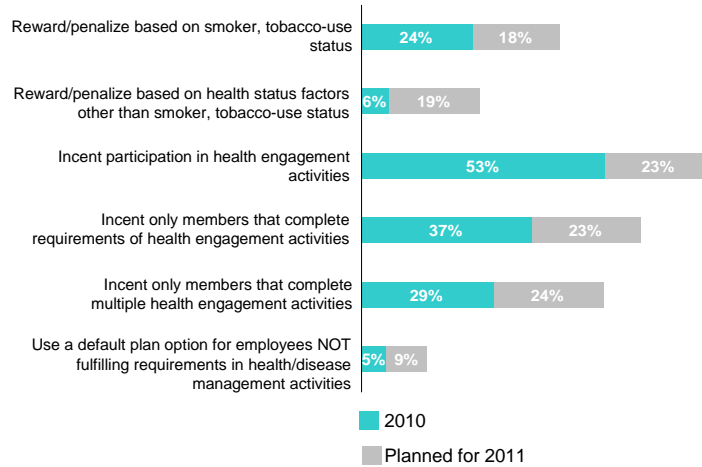
Percentage of Companies Offering Financial Incentives in Wellness Programs



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Tougher requirements for financial incentives

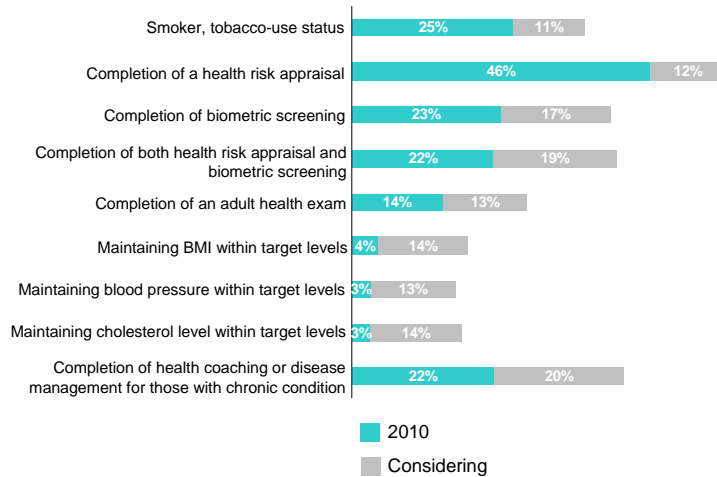


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Standards to receive financial incentives and/or enroll in preferred plan option

Requirements/Standards to Receive Financial Incentive

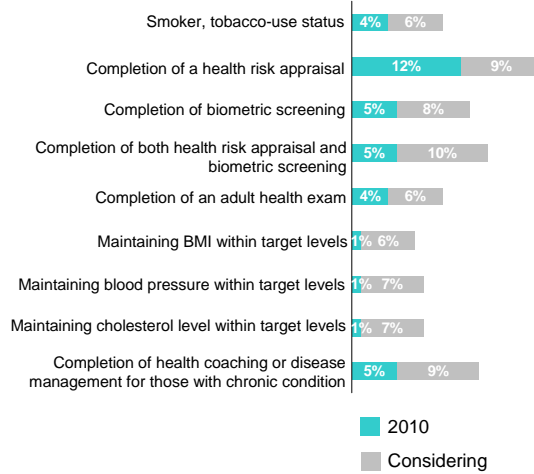


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Standards to receive financial incentives and/or enroll in preferred plan option

Requirements/Standards to Enroll in Preferred Plan Option



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Fine-tuning incentive amounts to boost participation

PERCENTAGE WITH HIGH PROGRAM PARTICIPATION BY AMOUNT OF INCENTIVE	NONE	\$50 OR LESS	\$51 TO \$100	\$101 TO \$250	MORE THAN \$250
Completion of a health risk appraisal	17%	24%	40%	57%	89%
Completion of a biometric screening	13%	15%	40%	54%	82%
Participation in weight management program	14%	23%	20%	39%	20%
Participation in smoking cessation program	10%	9%	9%	23%	10%
Participation in disease management program	27%	25%	25%	35%	18%
Participation in health coaching	18%	28%	38%	50%	50%

Notes: Based on companies that offer the program and provided a response for the participation rate. High program participation is defined as 50% and above for health risk appraisals and biometric screenings and 11% and above for other health-related activities.

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