



The Dossia Difference

By Mike Critelli





Year after year, American health declines, and the cost of healthcare keeps increasing. Hope springs eternal that some new product, program, cure, drug, treatment, or form of medicine will reverse this trend, but it does not happen. I will not repeat what everyone knows: we spend too much on healthcare and get disappointing results in terms of every major health indicator.

However, there are a few major notable successes in improving population-wide health trends. The percentage of Americans who use tobacco has declined by more than half over the period from 1970 through 2000, as has the incidence of motor vehicle accidents caused by drunken drivers. We can succeed in producing healthier outcomes, but we do not do so consistently. In each of these cases, the effort took a combination of legislative and regulatory initiatives, public health campaigns, education, financial incentives and disincentives in health plans, and a major change in cultural norms. The effort in each case took several decades, a speed of change we do not have the luxury of accepting for runaway healthcare costs and declining American population health.

Just as our country successfully reduced the percentage of tobacco users by more than half, we can reverse the increase in healthcare costs, improve its quality, and improve population health as a result. The key to achieving these apparently unachievable goals rests in the hands of the American people. If they are healthier and make more intelligent use of the healthcare system, healthcare costs will decline, and we can redirect a significant share of our GDP toward other critical uses, such as education, research and development, sustainability initiatives, rebuilding our crumbling infrastructure, and improving America's competitiveness. What will it take to get Americans to take responsibility for their health and healthcare to improve health, reduce healthcare costs, and improve healthcare quality?

Giving Americans the tools they need to manage their own health is necessary, but insufficient. Americans need to be engaged to use those tools, and they need to be nudged toward using them the right way. Dossia is the only personal health management system that combines the tools for engagement and empowerment and a framework for nudging people to do what is best for their health and healthcare.

So what makes Dossia unique in its ability to engage, empower and nudge its members toward the right behaviors?

Dossia engages its members by understanding and acting upon the all of the most powerful engagement levers.

Dossia recognizes that simply providing data and educational content for consumers works in some cases to help engage consumers to manage their health and healthcare, but only if they are induced to do so by other triggers. There are three reasons for this:

- For most of us, the concept of "optimal health" is not meaningful, unless we are experiencing a medical condition that explicitly and adversely affects what we have experienced as optimal health. We will react to pain, to fatigue, and to other noticeable physiological symptoms. However, on a day-to-day basis, we really do not understand how we would function with optimal health, as opposed to our current state of health.
- The health information available to us often is inconsistent, so we tend to tune it out over time. Moreover, published clinical studies, because they are based on small sample populations, overstate

the impact of a particular drug, treatment, or health-promoting practice. As a result, we do not tend to refer to health education materials unless we are forced to do so, because the effort to make sense of those materials is unduly complex.

- It is psychologically debilitating for many people to focus on their health. They do not want to confront their mortality or their physiological or psychological limitations. This is particularly true of athletes who play through pain or adults with a certain personality profile who are afraid to confront a medical problem. There are people who are so afraid of being punished by insurance plans, their employers or the government for having a particular health problem that they are afraid to be making inquiries about their health. A company that provides direct blood screenings for members of the public has informed me that 25% of their customers pay in cash to avoid having any record that can be accessed by an employer or insurance plan.

Therefore, to engage people in managing their health, we have to use other triggers or motivations. Fortunately, there are many latent triggers available to us, if we can find the right ones for an individual or family.

Thinking about the first reason people do not manage their health continually, we can identify benefits that alert people to the opportunity of improving their health in a more noticeable way. This often happens with people who are plagued with a condition like asthma or obesity and can significantly improve their life by changing their environment or their diet in ways that are easy to change and maintain. These alerts are most effective when they are timed to be communicated to an individual either because of a health event or a life event that makes the individual unusually sensitive to health improvement opportunities. Someone who has just been diagnosed with a debilitating condition has a window of opportunity to take transformative before habits get formed and reinforced. Women who become pregnant for the first time are more attuned to health-related messages, as well as many other marketing messages, because of a life event that makes them aware of their responsibility for another human life.

Education can be very effective if it communicates that something has changed to give people hope that whatever has not worked might work in the future, because of some new way of approaching a problem with which they have become resigned to accept.

Social acceptance as a health engagement tool

We also can identify motivators that are not health-related that will get people to engage in health-promoting behaviors. For example, more than one adult I have met along the way has focused on maintaining a healthier weight because of the embarrassment of having to shop for clothes for heavier individuals as a child. There is less of a stigma for being overweight today, but the fear of being humiliated for shopping for clothes for “fat people” stays with someone for a lifetime.

Conversely, in some cultures, losing weight is seen as an indicator of being addicted to drugs or having some horrible disease like HIV/AIDS or cancer, so the appearance of success in losing weight subjects the individual to social ostracism. We have to be sensitive to these cultural obstacles to health management. Social acceptance is a powerful motivator for good or bad behaviors, so any health management tool has to recognize the social environment in which an individual functions and help the individual engage in healthy behaviors in that environment.

Online tools can create social media resources that either can provide educational or emotional support for different challenges. These are simply online implementations of tools and systems that have been available offline for decades through such programs as Alcoholics Anonymous and Weight Watchers, or more recent programs like The Biggest Loser, that combine mutual support with a competition element.

Competition and challenge

Many people are stimulated to take advantage of health promoting activities to win a reward through a group or individual competition. The competitive element stays with us across a whole range of life activities and can be easily activated with either standard or custom-designed competitions and challenges. Online programs lend themselves to enhancing the value of competition by providing real-time feedback to participants about their competitive standing through leaderboards and badges.

Back in the early 1970's, I was astounded to see the degree to which my fellow Harvard Law students would feed quarter after quarter into a pinball machine placed in the school's Grill Room to move to the top of a simple leaderboard that was visibly displayed above the machine on the wall. People went to extreme degrees to win, even swapping tips with one another to learn how best to get those few extra points that would enable them to enhance their performance.

Health promoting activities like cumulative walking and exercise competitions, or even cumulative weight loss programs can drive very good behaviors if the programs are properly designed.

What makes competition so important as a motivator is that success is often its own reward. People will strive to win, even if there is no financial reward. We have become even more aware of the attractiveness of nonfinancial rewards through the popularity of online games that provide virtual rewards, often in the form of virtual currency.

Achieving "personal best" performance

There are certain people who are driven to improve on some performance dimension every day, independent of what others are doing around them. The continuous performance improvement motivation can be reinforced through an online tool that helps them see immediately how they are getting better on some dimension that contributes to health. Weight control or control of some other biometric indicator like cholesterol, blood pressure or glucose can be a daily motivator for "personal best" performance.

This is especially true of people who get excited about performance from exercise or fitness programs. The ability to run a faster mile or to go a longer distance for more time on a treadmill, or to lift more weight is highly addictive for some people. Experts believe that individuals who jog regularly to achieve "personal best" performance actually produce chemicals, such as endorphins, that create an addictive attachment to jogging.

Ability to perform certain pleasurable life activities

Many people improve their health solely to be able to do or be better at other activities. People will lose weight to be a better tennis player or engage in flexibility-enhancing exercises to be a better golfer or

basketball player. Unlike the previous motivator, in which excellence in the particular exercise or fitness metric is a final goal, the purpose of improving health for this kind of person is to improve the ability to do something else.

This is a particularly powerful motivator to an older person who wants to be able to do something that he or she used to do, but gave up doing in the mistaken belief that he or she was too old, or had an irreversible decline in capacity.

Ability to discharge certain responsibilities

The sad fact of life is that many people do not attend to their health until something happens which reminds them of responsibilities to others. Years ago, I met an African American cardiologist who found that some of his African American patients would not give up smoking until he reminded them that they might not be able to be available as a support resource as a grandparent. Because of the multigenerational closeness of many African American families, the message about grandparental responsibility would shock patients into taking corrective action when health messages totally failed.

Similarly, younger women can be prodded to quit smoking or to reduce or eliminate alcohol consumption when they plan to get pregnant. In certain social circles, women continue smoking to stay thin and be physically attractive to men, but find that smoking becomes a negative when they get married and want to start a family.

Financial rewards and incentives: value-based health plan design

Some portion of the population will respond affirmatively to financial rewards and incentives for health-promoting behaviors, independent of any other motivation. We are at the cusp of being able to integrate what had been separate employer-based incentives with health plan incentives with what we call value-based health plan design.

To be most effective, financial rewards and incentives need to meet certain criteria:

- They must be tangible in some way. The person being solicited to participate in a program through rewards and incentives must be able to imagine the impact of receiving a reward.
- They must be substantial. There is ample literature, most recently from studies conducted by Kevin Volpp of the University of Pennsylvania, that the opportunity to qualify for a larger reward through a lottery system is a more powerful financial motivator than a more certain receipt of a series of smaller rewards. Across a wide variety of markets, Robert Frank of Cornell University documented this human behavioral characteristic in his book *The Winner-Take-All Society*.
- They must be as immediate as possible. In the 1990's Pitney Bowes got some mileage from advising people that health promoting behaviors would result in lower health care premiums the following year, but the effectiveness of this reward was diminished over time because it was too far out in time, especially for a population that is less certain it will be in the company the following year to take advantage of the reward. Frequent Flyer programs work because they are immediate.
- They must be matched well to the behavior the marketer wants to promote. Too many employer programs reward activity rather than result. For example, they reward people for signing up for a

physical fitness program or taking a health risk assessment, rather than achieving the results targeted by those programs or activities. Programs must gain credibility by driving results, not activities.

The Old Way

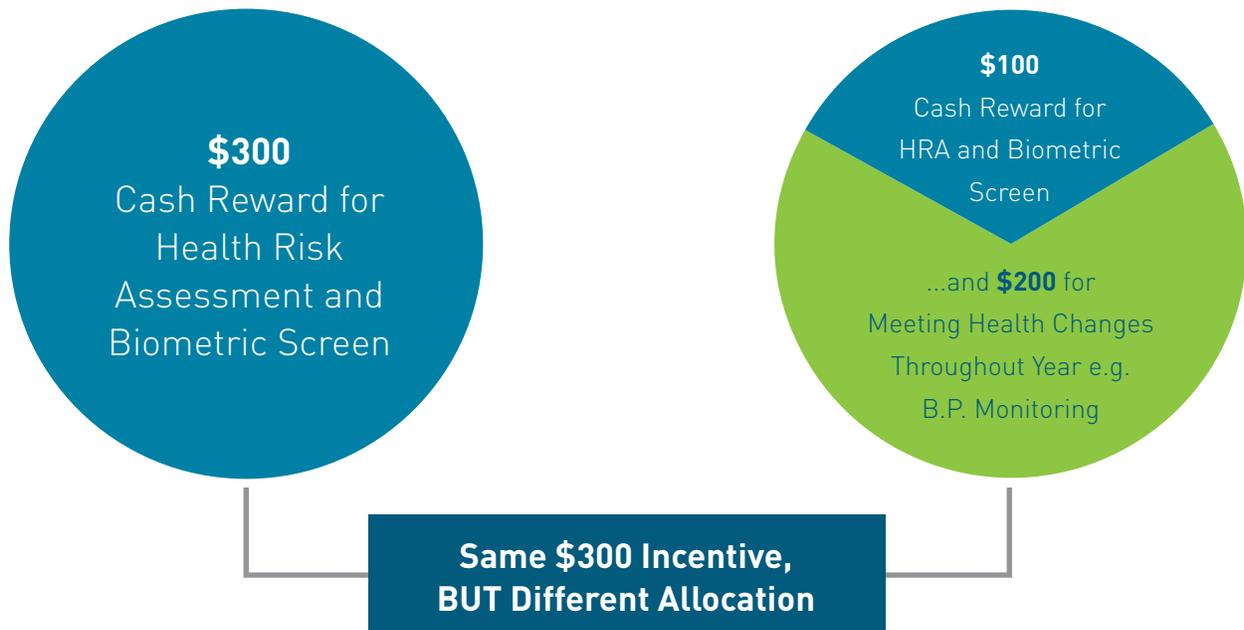
Reward for Sign-Up

e.g. Join Healthclub for Free/
Reduced Price

The Dossia Way

Reward for Behavior Change

e.g. Reward for Regular Attendance and
Exercide Reported by Integrated Devices



The care leader vs. the patient

The final engagement lever is the care leader, who encourages the patient to carry out healthy behaviors. The healthcare system and those who create policies, statutes, and regulations for it overlook a key component of healthcare engagement: in many cases, the person to be engaged is the care leader for a patient, not the patient himself or herself. Mothers are often simultaneously the care leader for their children, their spouse, their elderly parents, and, sometimes, their in-laws. Their information and support needs have to be addressed, along side those of the patient.

For example, one of the fundamental needs of a care leader is often remote care management, the ability to understand and assess the state of health of a child or parent in a remote location, whether that child is away at school or that parent is in an assisted living facility in a remote city. The website that manages health for the patient has to be accessible to the care leader and the tools available have to meet the care leader's needs.



Dossia - Empowering individuals to change health and healthcare

Dossia is an employer-led organization dedicated to improving health and healthcare in America by empowering individuals to make good health decisions and become more discerning healthcare consumers. Backed by some of the largest, most respected brands in the world - Applied Materials, AT&T, BP America, Inc., Cardinal Health, Intel, Pitney Bowes, sanofi-aventis, Vanguard Health Systems, NantWorks and Wal-Mart - Dossia's founding member companies have united under the common vision of changing healthcare.

The Dossia Health Management System makes individuals' aggregated health data actionable with customized applications brought together on a single intelligent platform to deliver personalized, data-driven solutions that enable users to get more value from healthcare spending, better manage chronic conditions and pursue a healthier lifestyle. Dossia integrates game and social dynamics, incentives and targeted messaging to foster sustained engagement and health behavior change, thereby offering long-term value to employers as well as their employees and families. Far too often employers overspend on health benefits for which they realize little value. The Dossia Health Management System is the solution for innovative employers that aim to rationalize their health benefits spending while engaging their employees as true partners in achieving high value healthcare.

For more information, visit www.dossia.org.

