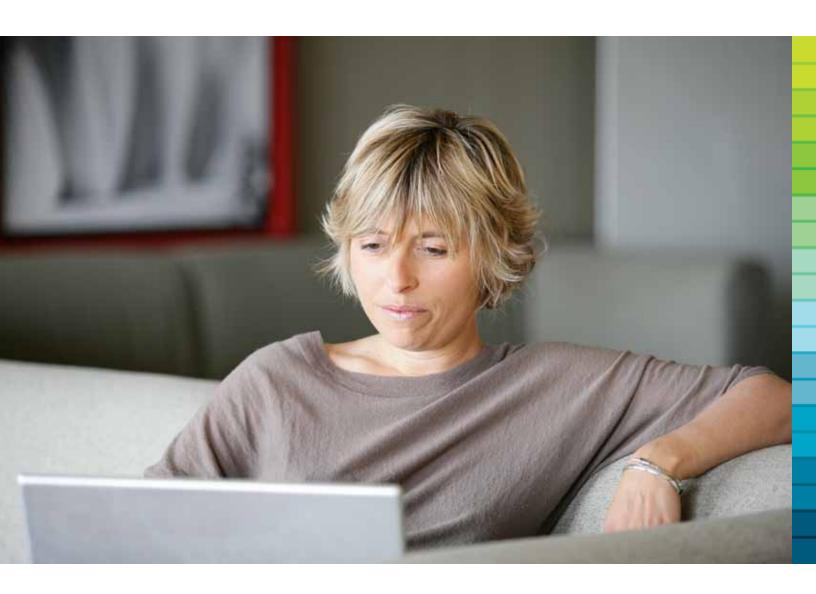# Dossia's Engagement Capability

By Mike Critelli

Online personal health management systems like Dossia's are particularly good at identifying and using engagement levers, because they can ask users what interests them, and can monitor user behaviors continually, if the user consents to such monitoring, to identify what the user actually finds engaging. In looking at a wide range of websites designed to produce health engagement, these sites work on one or, at most, a few of the tools for engagement. Some sites like Vitality, now part of Humana, rely heavily on sophisticated financial rewards and engagements. Others, like Keas, rely heavily on games and contests, both individual and social. Patients Like Me works specifically on helping people with particular medical conditions connect with others with similar conditions who can provide insight and support because they are, or have been, similarly situated. Still other sites, like Health Media, which is now part of Johnson & Johnson, attempt to learn about individuals through a small questionnaire and behavioral analysis to determine how best to market health promoting behaviors to them.Dossia provides informational and educational tools for those motivated by the availability of such tools. It provides games and contests, as well as social media tools for those who benefit from group support systems. It provides informational tools structured to remind people how they stand relative to personal best or externally established goals. It provides systems of both financial and non-financial rewards and incentives. It also has interactive online coaching tools to help individuals who need more than static information, through Dossia's partnerships with organizations like U.S. Preventive Medicine.

The optimal personal health management system of the future has to provide a range of engagement tools that works with the broadest and most diverse populations.

Dossia provides the tools that empower consumers to manage their health, healthcare, and health spending.

Once consumers are engaged with a health management system site, they need to be equipped with the tools to empower them to manage health, healthcare and health spending. We know that one of the essential components of an empowered patient is a comprehensive personal health record. Without such a record, the patient has a significant entry barrier in terms of choosing another provider. We realize the importance of the comprehensive health record by the degree to which healthcare providers and health plans make it as difficult as possible for their health records on a particular patient to be transferred to someone else.

Health management

Individual health is measurable through a combination of biometric and daily activity tools. Individuals will visit a healthcare professional when they have a medical condition they believe they cannot address by themselves. However, most of us manage a wide range of daily medical physiological issues with tools readily available to us.

If we have spring allergies, we take over-the-medication allergy medications. If we have a headache, we will take a pain relief medication. If we have sore muscles, we will try a muscle relaxant, or, on occasion, indulge in getting professional massage therapy.

The critical role of data capture in health management

The first step in successful management of health or self-managed chronic diseases is to know one's state of health, as indicated by various biometric indicators. As many people involved in various kinds of organizational initiatives have quoted the renowned business management consultant Peter Drucker: "What gets measured, gets managed." What we are able to measure and what we choose to measure heightens our likelihood of successfully managing a particular state of health or medical condition.

The key biometric indicators common to all of us are blood pressure, cholesterol, breathing capacity, weight, and the presence or absence of white blood cells able to beef up our immune system, and the presence or absence of important minerals and vitamins in our system.

Dossia is increasingly integrating various data capture tools available from biometric devices. As more devices become available, the data becomes easier to capture and communicate, and less work is required from the individual to set up and manage a data capture system, Dossia will be an even more effective data repository for data capture and analysis.

Most critical to the success of any biometric data capture system is the quality of having the person whose biometric indicators are being captured have to make as little effort as possible to get the data captured. Automatic systems, such as those Dossia enables, make data capture viable.

The marriage of data and analytic tools

There are several ways in which data is made more valuable in a personal health management system:

- The system can present the data and flag whether it is outside some accepted normal range;
- The system can show movement over time relative to a biometric indicator to help an individual know whether he or she is making progress against a goal;
- The system can show previously undetected linkages among various bits of data. This is particularly useful to a clinician who can make more sense out of looking at a combination of indicators than the patient is able to do;
- The system can provide more intelligence regarding potential adverse interactions among other kinds of data, such as the combination of medications, foods, beverages, or other substances the patient is ingesting; and/or
- The system can provide comparative data to an individual against other individuals in a population for competitive or social relationship reasons.

Dossia helps marry health-related data with analytic tools.

Data and applications related to healthcare cost, quality, and access

Individuals self-manage their health or manage health on behalf of other members of their immediate or extended families. The data available in a personal health management system helps them understand

the cost, quality, access, and comparative effects of various healthcare decisions.

For example, if they are considering getting a CT scan, because of a recommendation of their physician, a personal health management system can provide them with several types of data to aid in their decision:

- The cost of various providers;
- The quality of the work done by that provider;
- The goals and limitations of that test;
- The process of preparing for, undergoing, or managing the test; and
- The cumulative radiation exposure from the test, combined with other tests the individuals may have undergone in the past, and the risks associated with such cumulative radiation.

Dossia can provide all of this data through a combination of continuously updated cost and quality data relative to the providers, educational materials that describe the goals, limitations, and risks associated with the tests, and a continuously updated calculation of the individual's cumulative radiation exposure. To accomplish this solution, Dossia draws upon two applications:

- A price and quality transparency tool, which usually operates with certain rules and preferences the patient supplies, such as the distance the patient is willing to travel to undergo the procedure; and
- An educational shared decision-making tool for the patient.

Dossia also draws upon data specific to the patient's history of using imaging-based, radiation emitting diagnostic tests.

Another example of a combination of data and applications that assists an individual receiving healthcare is medication management. There are three separate inputs to an effective medication management system:

- Data regarding prescription or over-the-counter medication, typically provided by a retail pharmacy or a pharmacy benefit management firm;
- Data on drug-drug interactions that would be provided by a firm that specializes in collecting such data; and
- A service that helps the consumer determine where to acquire the optimal medication most cost-effectively.

Dossia collects the medication inputs, provides an application called Medication Manager to assist in the drug-drug interaction analysis and provides a price transparency application.

Data and applications relative to healthcare spending

The data a consumer needs to make healthcare decisions has to include a decision tool about healthcare spending. Most consumers who are part of employer-sponsored health plans have four sources of payment, and sometimes a fifth, for uses of the healthcare system:

- Payments from the health plan;
- Payments from a tax-favored vehicle, such as a flexible spending account, a health savings account, or a health reimbursement account;
- An employer-provided incentive plan; or
- Self-pay.

Employers or other stakeholders sometimes provided health services either free of charge or for a heavily subsidized price. An example of this is a free immunization or screening provided by a third party, such the government, a school, a provider of such services who is providing a service for a promotional program, or the health plan itself. Every consumer should find out where and from whom a free service is available to conserve his or her budget for services for which self-pay is the only available source of funds.

Health spending applications fit into three categories:

- Those which identify whether and to what extent the health plan pays for the service;
- Those which identify sources outside the health plan other than the individual consumer; and
- Those identifying the best price at which the consumer can obtain the service at an acceptable level of quality (the price transparency tools identified above).

Empowerment through assistive services

The Dossia marketplace not only provides information that enables the consumer to manage the health, healthcare, and health spending data, but Dossia also transfers this information into a personal health management system; it also provides access to services that assist the consumer in navigating through the healthcare system or in managing health or healthcare spending.

For example, Patient PAL is a service offered through the Dossia marketplace that enables the consumer to get telephonic access to resources that help retrieve health records, identify clinical options of which the patient might have been unaware, or address logistical issues associated with healthcare, such as emergency airlift services. The Prevention Plan from USPM is a service that begins with a scheduling of a baseline set of blood and other screenings, the completion of a questionnaire, and the provision of a customized prevention plan for an individual. Dossia is a site at which such a service can be accessed.

Scheduling direct telemedicine services

The Dossia marketplace now includes services such as Ameridocs, Teledocs, or Consult-a-doc, that enable the consumer to receive a telephonic consultation that avoids a visit to a doctor's office or an emergency department, and to receive both a digital oral record of the consultation and a printed copy of the doctor's call notes.

Such a service empowers the consumer to have additional healthcare service choices beyond what would be available for him or her through the bricks-and-mortar healthcare network.

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, sanofani-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**.