Transforming Wellness Programs:
Leveraging Mobile Technology Adoption to Drive Engagement and Outcomes

FROST *&* SULLIVAN

A Frost & Sullivan White Paper

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HEALTH AND WELLNESS INVESTMENTS BY EMPLOYERS: MOVING FROM SICKCARE TO HEALTHCARE

The transformation of the healthcare system in the US involves many trends that have become buzzwords: accountable care, the Triple Aim, population health management, big data analytics, patient engagement, and wellness and prevention are among the most used. To realize the promise of this transformation, key stakeholders—employers, providers, payers and individuals, along with families and caregivers—need to be aligned regarding the goals that each of these buzzwords represents.

While many investments are being made in connected health solutions as part of this shift, engaging patients and employees to deliver on the promise of long-term behavior change and improved self-management of their health and any chronic conditions is likely the most impactful. This goal can be complex when addressed by any single stakeholder. However, when addressed from the perspective of the individual, leveraging the technology they have already adopted, consumer/patient engagement can be successful.

Employers in the United States are key stakeholders and investors in achieving health and wellness goals. US businesses are investing more—and investing more wisely—in wellness services for their employees. The target of these programs is the same as it is for healthcare payers and providers—reducing the cost of healthcare and the impact of chronic diseases. According to a recent Rand study completed for the Department of Labor, "Out of concern about the impact of chronic disease on employee health and well-being, the cost of healthcare coverage, and competitiveness, employers are adopting health promotion and disease prevention strategies, commonly referred to as workplace wellness programs. Disease prevention programs aim either to prevent the onset of diseases (primary prevention) or to diagnose and treat disease at an early stage before complications occur (secondary prevention)."[1]

The key to success in meeting the goals of investments in health and wellness for employers is in migrating from a mindset of a single application, device or wellness program to a solution. This solution needs to bring together sensors, apps, devices and services in a way that is seamless to the individual, and delivers useful information and analysis via tools they already engage with in their daily lives—smartphones, computers, etc. Data and information flow needs to go beyond the current segmented device or app to bring together a more holistic view of the individual's health and to deliver that information to key stakeholders: family members/caregivers, healthcare providers, payers, and employers.

This is the promise of "connected health and wellness" that we are seeking. Solutions are available today that deliver the data collection, aggregation, analysis and sharing needed to achieve better health outcomes and lower system costs through the use of existing consumer tools that we use in our daily lives.

HEALTH AND WELLNESS TRANSFORMATION

The burden of chronic disease has been a major driver of the rising cost of healthcare in the US. According to the Centers for Disease Control (CDC), half of all adults have one or more chronic conditions and 70% of deaths are the result of chronic disease.[2] Chronic diseases have both a human and an economic cost. The Milken Institute estimates that the cost of chronic disease in 2023 in treatment and lost productivity will be over $4 trillion if current trends continue. However, this cost could be reduced by more than a trillion dollars through "reasonable improvements in preventing and managing chronic disease." The vast majority of these "avoidable costs"—over $900 million in potential savings—come from employee absenteeism and reduced productivity, not direct treatment costs.[3]

Thus the focus at all levels – government, insurers, healthcare providers, employers and individuals – is on better management of chronic conditions, as well as preventive care efforts to reduce the likely impact of chronic diseases in the future. With this focus comes a shift in investment toward preemptive actions that assist with awareness, fitness, and early diagnosis of at-risk individuals, as shown in Figure 1.

Figure 1: From Acute Care to Prevention – Track, Predict, Intervene, Manage
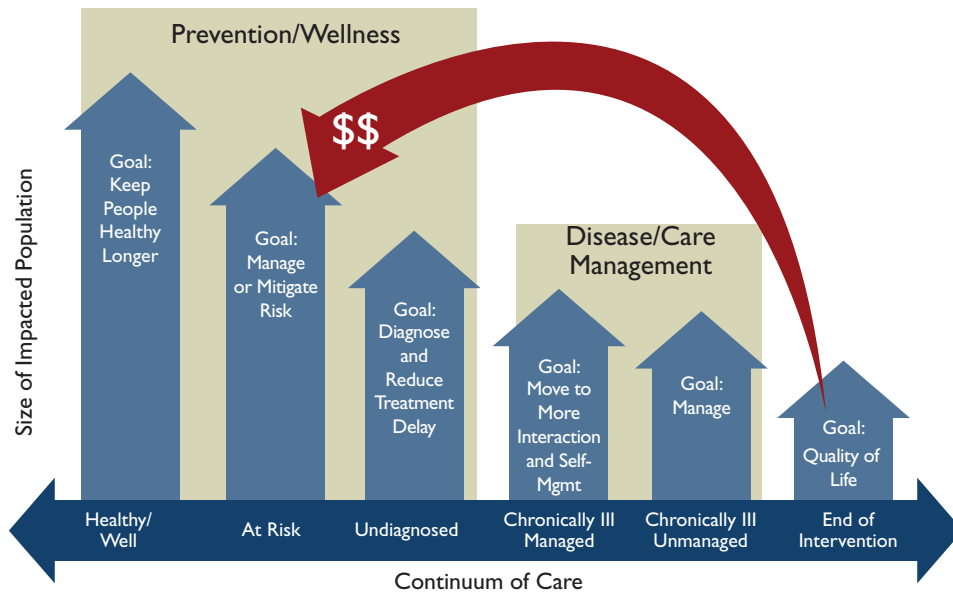
Source: Frost & Sullivan

Like other stakeholders, businesses are investing more in prevention and wellness, with the goal of impacting employee health and improving business performance.

> *In 2014, it is estimated that employers will spend 15% more on wellness-based incentives as part of healthcare benefits than they did in 2013.* A survey by Fidelity Investments and the National Business Group on Health found that *per-employee spending on wellness incentives has doubled in the past five years.*[4]

Of course, the Affordable Care Act and the advent of Accountable Care Organizations (ACOs) have also stimulated more focus on prevention and wellness among healthcare provider organizations. Providers are looking to mobile health (mHealth) solutions as a way to impact individual behavior and health literacy, as well as to collect biometric data that can drive analytics and needed interventions with individual patients. Most of the mHealth investments from the provider community are tied to disease management solutions and patient portal extensions, with an emphasis on chronic disease patients that need ongoing tracking. mHealth solutions that address wellness for the broader population are also a focus for mHealth apps provided to individuals by employers, healthcare providers and payers.

While the interest in wellness and prevention is high, there is a lack of evidence regarding what makes for a successful mHealth solution. In general, wellness program success is measured in different ways by different organizations. Few are able to calculate real ROI from wellness programs, and traditional measurements of success have tended to focus on awareness and participation in wellness programs.[5] Increasingly, however,

sophisticated employee benefit managers are seeking ways to measure ROI on wellness programs in terms of cost-savings for the company in reduced health insurance premiums and for individuals in improved health metrics.

With the move toward value-based payment models to healthcare providers, now more than ever there is alignment in the goals of employers, payers, providers and individuals in terms of what success means in wellness and prevention—better health for individuals, reduced system costs (and reduced payments), and increased quality of care as measured by individual satisfaction with their health outcomes and their interactions with wellness services, healthcare provider organizations and insurers.

THE ROLE OF MOBILE HEALTH IN CORPORATE WELLNESS SERVICES

mHealth can play a large role in meeting these goals—both in terms of ROI and perceived quality measures. Mobile health solutions meet the goal of higher touch at lower cost—a requirement for employers, payers and providers who are trying to impact larger populations while reducing system costs (review Figure 1). mHealth also allows for an individualized approach—people can adopt the apps that fit their specific needs, based on a variety of individual factors:

• Specific chronic conditions they may have (diabetes, hypertension, etc.)

• Fitness programs they may follow and goals they are trying to meet (walking, running, biking, etc.)

• Health literacy and guidance sought (regarding specific disease states, diet, medications, etc.)

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> Bottom line: mobile apps enable the healthcare industry to decentralize the care management process, mobilize millions of patients for accessing relevant healthcare services information and personalize their experience with the healthcare delivery system through diagnostic and health maintenance that can be customized to each person's preference. This transformation will help employers who continue to sponsor healthcare benefits for their employees to see improved employee satisfaction with their benefits, more productivity from healthier employees, and eventually a reduction in health benefit costs.[6]
>
> – Robert Oscar stated in Corporate Wellness Magazine
>
> "

mHealth also has an advantage in that it leverages tools that are consumer-based and are already part of our daily lives. Frost & Sullivan estimates that nearly two-thirds of US cell phone subscribers used smartphones at the beginning of 2014, and that number will grow above 90% by 2020.[7] For all types of activities, sophisticated mobile devices are integrated into our daily lives. With the smartphone as the platform of choice, every remote monitoring solution is shifting to an individual mobile device as the collection, transmission and display platform for individual interaction.

The other consumer platform that is rapidly driving change in wellness is wearable devices that collect biometrics and monitor activity, sleep, etc. The success of wearable fitness trackers has now expanded to more sophisticated and stylish devices. These devices allow for direct download of information to apps that can be accessed via the Web or via mobile devices. While these devices are often bucketed into the mHealth category, they are overwhelmingly adopted by individual consumers based on individual preferences and goals.

> Some enlightened employers, however, have started to offer wearables to employees as part of their wellness programs.

As one research team looking at mobile health impacts on health and wellness outcomes concluded, "Mobile interventions have the capacity to interact with the individual with much greater frequency and in the context of the behavior. As sensing technologies integrated with the mobile phone via Bluetooth or other data transmission process continue to develop, health behavior change interventions can be delivered based not only on self-reports and time/location parameters, but also on psychophysiological state, social context, activity level, and behavior patterns. The availability of these rich, complex, and frequent data inputs provides the potential to deliver health behavior interventions tailored not only to the person's baseline characteristics but also to his/her frequently changing behaviors and environmental contexts."[8]

BUILDING SUCCESSFUL WELLNESS PROGRAMS IN THE 21ST CENTURY

Wellness program success is built on engagement, motivation and sustainability. Wellness programs are often trying to achieve the difficult goal of behavior change. A focus on education and awareness is often one aspect of changing behavior, followed by goal setting, introduction and commitment to a structured program for individuals to follow, a meaningful incentive or motivation system, and feedback provided to the individual regarding performance to reach goals.

Effective wellness programs that focus on behavior change and measure success in terms of health outcomes should have the following elements:[9]

- Content, goals and program focused on the individual

- Clear communications to program participants

- Biometrics used to develop the baseline assessment of each individual and the population in the program

- Utilize analytics to identify risk factors that will drive effective and timely interventions

These are often benchmarks that are hard to meet for most wellness solutions. Program individualization can be very difficult to achieve among even a single company's workforce at a single location. This employee base will include a variety of age groups, family types, cultural backgrounds, and even income variation. These distinct variations impact the likelihood that the individual will relate to and accept program content, role models, goals, methods and motivations.

The ability to collect accurate and consistent biometric data is a challenge for wellness programs that require the individual to go to the collection point or the collection point to go to the individual. Without regular and normalized data collection methods, accurate analytics cannot be leveraged to evaluate risk factors. Risk

factors identified and timing of interventions are likely to be individualized as well, further complicating brick and mortar-based programs.

mHealth solutions are ideally suited to address individual variations in content, communications, timing and location of data collection, as well as goal setting, methods chosen to meet goals, motivations and feedback.

- Content can be aligned with each person's needs or demographics

- Individuals can utilize the solution based on their schedule and location preferences

- A variety of wearable sensors can be integrated to connect through mobile devices we have with us nearly 100% of the time

- Goals can be set and progress can be tracked for each person, and performance rolled up for the group

- Feedback can be provided to individuals via a platform and modality they are comfortable with and can easily access

The only downside to mHealth to date has been the issue of integration. Many wearable devices and mHealth apps exist as stand-alone silos of information. The importance of integrating information for each individual across the multitude of biometric data that can be collected cannot be stressed enough, as this creates value for individuals, clinicians, analytics, etc.
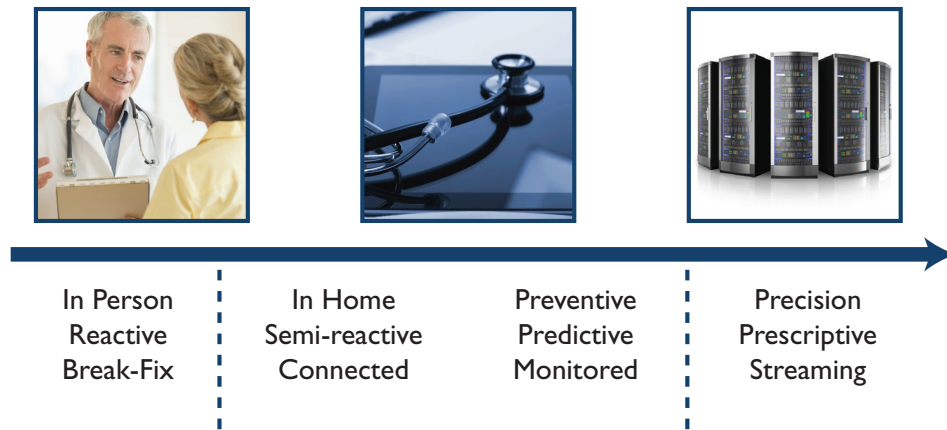
Solutions exist that address this issue. mHealth platforms that support a wide variety of devices and integrate data from different devices into a holistic record of the individual are even better positioned to meet the needs of best-in-class wellness programs. Mobile device manufacturers have been on the forefront of this platform approach and are building new sensor capabilities into their smartphones, as well as creating their own multi-function wearable devices.

For employers looking to enhance their wellness solutions offered to employees, a platform approach allows for variations over time, in terms of customization and increasing offerings – both can be done without the switching costs of moving to a new solution. Apps and solutions can be added onto the existing platform by the company and the individual.

A SOLUTION APPROACH TO DELIVER WELLNESS PROGRAM SUCCESS

Successful wellness programs that meet goals in improving health outcomes and result in sustainable behavior change have not been the norm. Behavior change is difficult, and keeping people engaged in wellness programs to achieve real health outcomes and long-term ROI has been unmeasured at worst and an elusive goal at best.

The good news is that there are new approaches that drive improvements in wellness program results. Frost & Sullivan believes best-in-class wellness programs are built on solutions that combine services, content, individualization, feedback loops and the ability to collect information in a more continuous stream. Wellness services of this type are part of the transformation we see occurring in wellness and healthcare overall, as shown in Figure 2.

Figure 2: Healthcare Reimagined

In Person	In Home	Preventive	Precision
Reactive	Semi-reactive	Predictive	Prescriptive
Break-Fix	Connected	Monitored	Streaming

Source: Frost & Sullivan

These wellness solutions need to leverage technology that supports connectivity to bring in data from a variety of locations, and integration of that data in a platform that supports analytics, reporting and feedback to both individuals and organizations. The solutions must be scalable, so technology solutions should leverage consumer-grade connectivity devices that are mass-produced and scalable. However, as with everything involving individual health data, security and privacy are key considerations that must be addressed at both the device and platform levels, so vendor security capabilities are important evaluation points.

User experience is key to successful wellness solutions and mHealth applications, and the platform interface should be user-friendly and be driven not from a healthcare provider view of the world, but from a consumer view of the world. It is important that solution providers leverage the knowledge and capabilities of consumer-savvy organizations and designers. The best mHealth platforms also allow for combination of a variety of devices and applications, and can integrate the data streams from different devices and apps to provide a holistic view of the person's condition. Other user-friendly features include the ability to automatically upload from devices, without requirements for manual data entry, and individualization of programs, goal-setting, communication of reminders and alerts, and the ability to share information with an individual's "network" at their request.

> It is our view that the best mHealth platforms meet these requirements, utilize devices that are already integrated into our daily lives, and are with us 24/7/365 to support the stream of information and ongoing interaction that will have the highest impact on utilization, behavior change and analytics.

Businesses that are investing increasing budgets in wellness solutions for employees need to be able to see the ROI on their investments in terms of lower health insurance costs, improved absenteeism rates and increased productivity (though the latter is harder to isolate and measure). In evaluating wellness service offerings and programs, employers should focus on those vendors who provide solutions, platforms and portfolios that offer consumer-friendly engagement and meet stated consumer desires for convenience and personalization.

Sustainability of wellness outcomes requires that individuals be active, engaged and take ownership of their activities to achieve wellness goals and outcomes. While the employer needs to see information and results, so do employees. mHealth platform solutions support individual and organizational goals in delivering ROI in wellness program results.

ENDNOTES

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5. Sean Gallivan of Healthentic presents an interesting maturity model of employer benefits managers falling into three classifications in terms of wellness program management: Administrators, Promoters and Life Changers. Administrators explain benefit information to employees; Promoters increase participation in wellness programs and measure their success in terms of participation rates; Life Changers strengthen employee capabilities as healthcare consumers and educate employees about the costs of lifestyle decisions.

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