



## The Integrated Personal Health Record and the Involved Consumer

American healthcare is evolving, and individual consumers are realizing they must take on more responsibility for driving fundamental change. They are being spurred by a greater financial stake in the outcome of their healthcare choices. And they are supported by technology advances that give them access to and control over their own health information. But information is not enough.

### **The Role of the PHR in Improving Quality and Lowering Costs**

Consumers need improved access to providers, the ability to choose care based on cost and quality, and resources that encourage them in wellness and prevention endeavors. This supports the objectives of key industry stakeholders to provide better continuity of care in order to improve quality and lower costs.

A consumer-controlled personal health record (PHR) can help achieve these objectives. Stakeholders such as providers, employers, and health plans have a vested interest in helping consumers make better healthcare decisions. More importantly, they have access to rich data sources to help populate health records and have the opportunity to influence their population's behavior. But the model for the ideal PHR continues to shift. Different providers have emerged, each with its own delivery mechanism and functionality.

Any PHR should allow consumers to gather, store, manage, and share their essential health information. But it must also be portable, so consumers can access the information regardless of their employer, health plan, or provider, and can manage and update it over time for a lifelong view of their health. Consumers also need a PHR that can work for them, by guiding them to appropriate resources and interventions and helping them actively participate in managing their health. It must be both connected and actionable – integrated with data sources and appropriate health applications – so that consumers are involved, not just informed.

## STATE OF U.S. HEALTH INFORMATION

- > Incomplete and inaccessible health records and lack of consumer information lead to waste in healthcare spending – at least 30%, or \$690B annually.<sup>3</sup>
- > The costs of duplicate laboratory and radiology tests average \$271.92 per individual, approximately \$65.6B each year.<sup>4</sup>
- > Medication errors cause 1.5 million injuries each year, costing \$3.5B.<sup>5</sup>
- > About 98,000 people die each year as a result of preventable medical errors.<sup>6</sup>
- > 40% of emergency department visits are not urgent, but occur because the patient cannot see their primary care physician.<sup>7</sup>
- > 43% of adults reporting an urgent condition were unable to receive care when they wanted it.<sup>8</sup>
- > From 1997 to 2001, the percentage of people reporting they were unable to obtain a timely appointment rose from 23% to 33%.<sup>9</sup>

## Three Primary PHR Models

The industry is moving rapidly, and while PHR systems are characterized by a wide variety of features and functions, three primary PHR models are emerging.

**Tethered.** The model that is most connected to the doctor's practice – but also most closely tied to the slow pace of electronic health record (EHR) adoption – is the “tethered” model in which a doctor's EHR system enables web connectivity for patients. Generally, these systems allow patients to view their EHR data and message their care providers, but consumer control and portability are limited. Also, these systems don't easily allow for combined data from multiple providers.

**Untethered.** The second model features an “untethered” online PHR repository offered by an Internet company. The untethered PHR promises to connect to various data sources and allow a variety of third-party applications to connect to it, but support for these assorted systems may be limited. Without connectivity to data sources and full integration to relevant applications, these PHRs are unlikely to drive consumer behavior change. In addition, the security of sensitive data can be a concern when working with companies for whom patient privacy is not a core competency.

**Integrated.** The third model, exemplified by WebMD, combines the independent data repository function with an integrated set of portal applications and services that are tightly connected to the PHR. Unlike tethered PHRs, this independent PHR is completely consumer controlled and managed. Although the WebMD PHR may be sponsored by an organization such as an employer or health plan, it can provide lifelong access and portability by the consumer. And as the most recognized and trusted provider of health information today, WebMD offers complete confidence in the security and privacy of individuals' health information.

## The Integrated PHR and the Involved Consumer

While the independent PHR maintains its focus on the consumer, integration helps the PHR be both connected and actionable. The integrated PHR incorporates self-reported and professionally sourced data and is able to interoperate with a wide range of data sources and applications. This includes claims data, which – when handled correctly – can be a valuable source of complete, accurate health history information. Other services can include document management, secure messaging, device integration, provider access, and clinical alerts. While connectivity is valued by stakeholders – according to a recent report, interoperable PHRs could save \$19B annually<sup>1</sup> – the PHR must also make this information actionable by normalizing and translating information from a wide range of data sources to be usable by the consumer.

For consumers accustomed to sophisticated online shopping and banking experiences, personalization is another key to the success of the emerging PHR model. Consumers are far more likely to use and act on health information that is relevant to their individual situation and that offers guidance on how to effectively use the data provided. The integrated, independent PHR can combine personalized health-management and decision-support applications with health record data to actually drive behavior change and improve health. A recently completed WebMD survey found that frequent PHR users – those who accessed their PHR an average of three times per month – were 2.3 times more likely than a control group to be up-to-date on their preventive screenings.<sup>2</sup>

WebMD has offered a PHR to consumers for more than 10 years and has the largest base of PHR users in the U.S. Approximately 200 large employers and health plans trust WebMD to provide a PHR platform for their employees and members. Recently, several large employers have partnered with WebMD to give their employees access to their personal health record and provide additional services so employees can make more informed decisions about their health. (See sidebar below.)

## Government Activity and PHR Evolution

The American Recovery and Rehabilitation Act (ARRA) specifies several initiatives that may encourage improvements in PHR accessibility and interoperability, and an increase in use. The healthcare IT stimulus package – which includes approximately \$19B for electronic health records in doctors' offices and hospitals – and the National Health Information Network (NHIN) that will allow EHRs to securely communicate, are steps toward a more connected system.

While health information exchange (HIE) efforts and even many EHR efforts have not prioritized connectivity of the patient, there are several efforts converging to support broader connectivity between them and independent PHRs. These include recent legislation that requires access for consumers to their electronic health records, and the requirements for use of specific data exchange standards. Also, ARRA should help further HIE and health record bank efforts, which can be used to drive greater consumer connectivity.

Another movement that is gaining traction is the idea of the “medical home,” which coordinates primary care and information technology as a way to improve quality and lower costs in the healthcare system. It is supported by large employers, the American College of Physicians (ACP), the American Academy of Family Physicians (AAFP), and health plans, and is increasingly a hot topic for legislators as part of healthcare reform.

PHRs and related services – including secure email, appointment requests, and online lab test results – can be offered by physicians today as part of a medical home. And standards-based, independent PHRs can connect consumers to their data and providers from across the continuum of care. Resources for lifestyle improvement, disease management, and decision support for consumer healthcare spending are natural complements, enabled by a PHR that is both integrated and independent.

## CONSUMER ATTITUDES ON PERSONAL HEALTH RECORDS

- > In 2008, 7.3 million U.S. adults used online personal health records, while 72.5 million U.S. adults reported interest in using online PHRs.<sup>10</sup>
- > 57% of consumers desire a secure Internet site to access medical records, schedule office visits, refill prescriptions, and pay medical bills, and 55% want to use email to exchange health information with doctors and get answers to questions.<sup>11</sup>
- > 79% or more of the public believe using an online PHR would provide major benefits in managing their health and healthcare services. Among those not interested, concern for privacy is the most frequently cited reason.<sup>12</sup>
- > A five-year annual growth rate of nearly 53% is projected for Internet-based personal health records.<sup>13</sup>
- > Adoption of web-based personal health records by 80% of the U.S. adult population is achievable and could result in significant savings.<sup>14</sup>
- > 65% of consumers are interested in home monitoring devices that enable them to check their condition and send the results to their doctor.<sup>15</sup>

## EMC ADOPTS WEBMD'S PERSONAL HEALTH RECORD WITH LAB RESULTS AND PERSONAL HEALTH MONITORING

EMC Corporation recently became one of the first companies to integrate clinical lab results from Quest and Labcorp into its WebMD PHR. In addition, the WebMD Personal Health Monitoring service offers integrated remote home medical-device monitoring for improved health management.

*“By integrating biometric data into employees' existing WebMD Personal Health Records, employees will have more insight into the impact of their daily activities. This greatly enhances our employees' abilities to make informed choices, take targeted actions, and ultimately helps sustain health improvement efforts.”*

– Delia Vetter, Senior Director of Benefits and Programs, EMC Corporation

## What's Next?

HIEs, EHRs, and the NHIN promise to make data more available to care providers over the next 10 years. In the meantime, PHRs and patient-facing services can support greater consumer involvement.

The consumer will continue to be elevated as the focus of the healthcare system and PHRs will play a key role in that process. Health plans, especially, seem not only willing to support these efforts, but are also able to use their administrative processes such as eligibility verification to facilitate delivery of important clinical information and alerts to the point of care. Even before HIEs become commonplace, and with the support of plans, employers, providers, and systems vendors, consumers should be able to connect through their PHR to more and more data sources and providers. This will provide greater continuity of health information that can travel with them.

Moving forward, we must continue to inform consumers. But we must also move beyond that. We need to create involved consumers who can use their lifelong health information along with integrated resources to change unhealthy behaviors, analyze treatment options and costs, and then make healthcare decisions that result in better outcomes and lower healthcare costs.

## About the WebMD PHR

WebMD provides a complete PHR solution and an integrated user experience to help people manage their health and make more informed decisions. This promotes a collaborative approach to health and wellness, while placing consumers at the center of their care. WebMD's solution develops a dynamic health profile for each user that captures and analyzes data from multiple sources to provide each person with relevant and actionable resources and services, from personalized health content to medication and care alerts.

The WebMD PHR was developed over the past 10 years by consistently introducing innovations that make healthcare data actionable, aggregating a consumer's health information from multiple sources, and combining this information with benefits, financial, provider, and treatment decision-support information. As the most trusted brand of health information, WebMD helps consumers feel confident about the security and privacy of their health records.

## WEBMD PHR FACTS

- > WebMD has more than 10 years of experience providing personal health records. The WebMD Health Record<sup>SM</sup> was first introduced in 1999 and has millions of users.
- > Frost & Sullivan awarded the WebMD Health Record the 2007 Market Leadership Award.
- > WebMD was ranked 13th on the 2008 TRUSTe survey of the 20 most-trusted companies for privacy, and was the only healthcare company in the Top 20.
- > WebMD is a participating member in associations such as HL7, and actively works with public-private organizations such as the Markle Foundation's Connecting for Health Initiative, the Healthcare Information Technology Standards Panel (HITSP), and the Certification Commission for Health IT (CCHIT).
- > Hundreds of employers, health plans, and government agencies currently provide the WebMD Health Record to their employees, plan members, and individuals to gather, store, and manage their healthcare information.
- > WebMD is recognized as a business associate under the Health Insurance Portability and Accountability Act (HIPAA).

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