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## In The Electronic Age, Is PHR Adoption Lagging Behind?

In 2010, the market for Personal Health Record (PHR) software generated revenues of approximately \$312.2 million and market researcher, Frost & Sullivan, estimates that PHR software market revenue will reach approximately \$414.8 million by 2015. An anticipated 5.8 percent compounded annual growth over the next four years may come as a surprise to some, particularly in light of the slow rate at which providers and consumers have embraced PHRs.

A PHR is a digital record of one's personal health information. This information is easily accessed, and in some cases may be updated by patients via the internet. PHRs allow patients to maintain personal health information in one place and share recent health services or conditions with providers. Some PHRs allow patients to refill prescriptions, schedule appointments, and even email their provider.<sup>2</sup>

Currently, three forms of PHRs exist: (1) untethered; (2) tethered; and, (3) payor-tethered.<sup>3</sup> Untethered PHRs are a manually compiled collection of electronic or paper records, managed solely by the patient. Tethered PHRs restrict patients from making changes to their records and are instead controlled by a healthcare provider and updated automatically by a physician controlled Electronic Health Record (EHR). Payor-tethered systems refer to those managed by a third party and are primarily generated through the use of claims information (e.g., Goggle Health or Microsoft HealthVault). The payor-tethered system allows a patient to manage limited demographic information within their PHR. While PHRs may provide patients a more involved role in their healthcare experiences, a 2011 IDC Health Insights poll revealed that "only a mere 7 percent of survey respondents reported having ever used a PHR."

The results of the 2011 IDC survey mirrored those observed in 2006, showing a surprising lack of growth in the field of PHRs. In both years, approximately 50 percent of survey respondents identified lack of exposure as the primary reason for not using a PHR. In addition, only a quarter of respondents claimed to be comfortable posting their personal health information on a commercial PHR. In addition to consumers failing to embrace commercial PHRs, physicians have also expressed some concern surrounding patient autonomy and healthcare records. 6

As of February 2011, only 14 percent of 856 responding physicians reported using PHRs on a daily basis. Additionally, 79 percent of physicians reported concerns with the validity of data retrieved from a PHR. Allowing patients to manage and update their own health information may create opportunities for inaccuracies and errors within the PHRs and could potentially lead to errors in treatment. Physicians also expressed concerns that tethered PHRs updated by the clinicians' EHR systems may send patients their lab results prior to physician review, leading to the improper release of highly sensitive medical information. Potential risks such as breach of internet security and identity theft may also be a concern with online PHRs. 10

Despite physician concerns, patients primarily use PHRs when they are linked to a health provider (i.e., hospital or physician web site or health plan web site). <sup>11</sup> Dr. Sandhya Wahi-Gururaj, from University of Nevada School of Medicine, believes patients should be restricted from updating the PHR, but should have access to review their medical history and even obtain a print out of the medical history, if they desire. <sup>12</sup> Some healthcare facilities have found a way to manage the PHR so that the patient and clinician can most successfully utilize PHR data and resources.

Mercy Health in Chesterfield, Missouri has rolled out an integrated version of the tethered system. This system allows patients to access their PHRs, which are updated and managed by the Mercy EHR system. Patients have capabilities to make notations within their PHRs, which are saved in the online PHR, though they are not updated within the EHR. This alternative still allows patients to feel engaged in their healthcare without compromising the validity of the clinician controlled EHR. <sup>13</sup>

In this era of healthcare reform, change is constantly on the horizon with increased emphasis on technological advancements and utilization. Although Google Health has announced retirement from the PHR Market due to the low adoption, consumers seem less reluctant to participate in a tethered PHR. <sup>14</sup> With growing importance placed on quality of patient care, an integrated PHR system that includes data input by the patient, the provider, and the payor may aid in communication between all three parties and improve the continuum of care. Ultimately, this increased

communication and control through PHRs may result in a more positive patient experience and improved health outcomes.<sup>15</sup>

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- 4 "PHRs A Technology Still Looking for a Market" Posed by Lynne Dunbrack, IDC Health Insights, June 20, 2011, http://idcinsights-community.com/posts/0ffcaa9be1 (Accessed 10/6/2011), quoting "Vendor Assessment: When Will PHR Platforms Gain Consumer Acceptance?" By Linda Dunbrack, IDC, March 2011.
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Mr. Cimasi is the author of numerous additional chapters in anthologies; books, and legal treatises; published articles in peer reviewed and industry trade journals; research papers and case studies; and, is often quoted by healthcare industry press. In 2006, Mr. Cimasi was honored with the prestigious "Shannon Pratt Award in Business Valuation" conferred by the Institute of Business Appraisers. Mr. Cimasi serves on the Editorial Board of the Business Appraisals Practice of the Institute of Business Appraisers, of which he is a member of the College of Fellows.



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