

**Title: Integrating Personal Health Records and Electronic Medical Records:
Impossible Dream or Essential Task for New Delivery Paradigms**

**Authors: Roger A. Edwards, ScD, Managing Consultant, Life Sciences & Healthcare;
Dale Robinson, MS, Member – PA's Management Group, Product & Process
Engineering, PA Consulting Group**

Health care delivery is evolving to respond to the ever-growing demands of aging baby-boomers in the context of demands for new treatments at affordable prices. Numerous platform technologies provide opportunities and challenges for creating and realizing the envisioned benefits to meet the expanding needs. The interface of personal health information with provider-based medical record information poses significant challenges from many perspectives. This review will highlight those challenges and identify pathways to address the conflicting and synergistic parameters that exist in this complex space.

The challenges will be addressed from a technology adoption risk analysis perspective and identify alternative ways to examine these complex topics using Christensen's "Jobs-to-be-Done" framework to assist in identifying what product features are relevant. This view focuses on what customers are 'hiring' the product to do - the circumstance - in contrast to market segment-oriented views that focus on the product or user characteristics. Thus, the "Jobs-to-be-Done" view in contrast to a "Product" view or "Demographic" view enables us to address the complex issues associated with integrating personal health data with provider electronic medical record data.

Potential solutions must overcome a wide range of technical and system challenges including security of patient information, portability, secure storage for immediate, remote access to imaging and diagnostic data, patient control and authentication, and provider and payer-based systems with multiple and conflicting purposes. The potential solutions will require adaptation of a range of rapidly evolving technologies including wireless communications, biometrics-based identification, smart-cards, and information technology infrastructures. Optimal solutions may also require rapid development of enabling technologies that have not yet been defined.