



Connectyx Technologies Shifts the PHR Paradigm with MedFlash ePHM

When Connectyx Technologies acquired the technology assets of MedFlash in 2007, Ronn Schuman saw much more than a run-of-the-mill Personal Health Record (PHR). He saw the kind of innovative technology that would revolutionize the burgeoning PHR industry by addressing consumer demand for an intuitive, interactive and easy-to-use health management system.

“I saw the potential MedFlash had to be much more than a filing cabinet for storing health information,” said Schuman, President and CEO of Palm City, Fla.-based Connectyx (CTYX.PK), which specializes in providing unique products for the healthcare market. “Widespread consumer adoption of PHRs is integral to improving both the healthcare system and overall health and wellness of the U.S. population. The problem, until now, has been the industry’s failure to provide people with the kind of technology they have told us repeatedly that they want.”



Schuman points to research from the California HealthCare Foundation (CHCF), released in April 2010, in which 56 percent of participants who indicated they used a PHR felt they knew more about their health as a result. Fifty-two percent said they felt they knew more about care provided by their physician, while 40 percent believed the PHR led them to ask questions of their physician that they hadn’t asked previously. Other key findings included 38 percent of respondents who felt more connected to their physician due to their PHR and 32 percent who said the PHR led them to do something to improve their health.

“Despite those obvious benefits, PHR adoption remains low, somewhere between 3.5-7 percent,” Schuman said. “And while there are obvious obstacles, such as concerns over privacy and security, an emerging viewpoint is that consumers aren’t going to pay for and use something that is basically a storage bin for static information. They want something that will help them with health decisions and ultimately lead to a better quality of life.”

Industry watchers such as Chilmark Research agree. In its 2008 report *Analysis & Trends of Internet-based Personal Health Records’ Market*, Chilmark noted that consumer apathy was one of the greatest obstacles to adoption of web-based PHRs.

Specifically, the authors noted that educating the public on the value they will derive from an iPHR was an important first step, but that vendors will also “need to increase the value they actually provide. Such value will require a far better analysis of consumer needs and structuring their solutions to meet those needs. It will result in solutions that go beyond being a simple repository of information (records) to more sophisticated solutions that securely and privately analyze those records to deliver the consumer personalized and actionable information that they can apply to their specific health and/or the care of loved ones. Future solutions will also go beyond the computer for both delivering actionable information as well as collecting data from the consumer via multiple modalities including medical devices, cell phones, smart phones or PDAs.”



With MedFlash, Connectyx has not only met those early expectations, but is exceeding them with an integrated offering that leverages physicians' electronic health record (EHR) systems, "smart" medical devices, mobile phones and social media to deliver a revolutionary electronic personal health manager (ePHM).

The MedFlash ePHM

The MedFlash proprietary electronic personal health manager is anchored by an online portal which provides a simple user interface, optimized so that members can easily enter, store and manage their critical health information.

One key to the MedFlash electronic personal health manager is the proprietary MedFlash USB drive, which incorporates flash memory technology and connects to personal computers via the Internet and a standard USB interface. With a distinctive red exterior casing emblazoned with the universal "medicine" symbol, the MedFlash drive is also highly visible and extremely portable.

The MedFlash proprietary synchronization software makes it easy for members to synchronize selected information from the online electronic personal health manager portal to their portable MedFlash drive. MedFlash provides a proprietary "line item lock" that enables users to control which information flows from their online PHR to their portable MedFlash USB drive. MedFlash synchronization software will also enable members to integrate their smart devices and computer peripherals, such as document scanners, blood pressure cuffs and fax modems.

"It is very important that all of our technology be something that does not require healthcare or technology expertise to use," said Connectyx Chief Architect Michael Robbins. "We are a very consumer-oriented company and dedicated to providing products that focus first and foremost on consumer utility."

In addition to the USB, the comprehensive MedFlash electronic personal health manager includes a 24/7 call center and personal I.C.E. (In Case of Emergency) portal. The latter enables access to a member's emergency medical profile and health information via toll-free call center, an online emergency portal or the MedFlash portable USB drive. The MedFlash drive can also include personal documents uploaded by members such as x-ray images, doctors' notes, living wills or photographs.

There are also lifestyle and wellness features that can provide significant cost and liability savings for employers and insurers.



The current MedFlash application that installs from the USB drive to the user's computer is also being upgraded to an open synchronization tool which will be part of the MedFlash Personal Health Network. This will accomplish two usability goals. It:

1. Decouples synchronization from the web portal, allowing new users to begin their PHR online and then add their devices later, thereby accommodating free trials, affiliate programs and a new sales channel that begins and ends online.
2. Expands to connect with other online PHRs and multiple devices and services, such as blood glucose meters, prescription interaction services, smart phones, calorie counters, prescription reminder services, etc.

The MedFlash system is highly secure, protected behind an encrypted system located in a hardened facility offering Tier One through Tier Three protection.

Connectyx also has plans to establish a relationship with a large ISP like Oracle to administer the electronic personal health manager system as the volume of MedFlash members grows. Oracle has demonstrated that they can easily manage tens of millions of potential MedFlash members.

The common theme behind every advance it makes to the MedFlash system is Connectyx's desire to provide consumers with a cost-effective product that is meaningful and helps them to improve the quality of – and potentially save – their lives.

"We are committed to providing an easy management tool for people with the desire to successfully participate in their own health and well-being," said William E. Carlson, M.D., Chief Medical Officer, Connectyx.

Approach to the Market

Those values and that desire to provide consumers with a truly impactful personal health manager can be seen in nearly every aspect of Connectyx, including its approach to market. The company recognized early on that positioning the PHR as a standalone product simply would not provide consumers with the kind of in-depth interactive features they need to become more engaged in their healthcare. That is why, although MedFlash incorporates the traditional PHR, it goes well beyond that static technology.

In fact, the MedFlash approach is one designed to appeal to all three viewpoints in the market today: electronic personal health record, electronic personal health manager and personal health network (PHN).

"There is a tendency for people to look at this and say it's a personal health record," said Robbins. "But when you add devices to it, it becomes an electronic personal health manager. Then, when you add social networking tools, it becomes a personal health network. That is where MedFlash is going. Wellness advocates who have adopted the personal health network vision are saying we don't just need better information or smarter devices connected to our personal health record; we need a better physician-patient relationship as well.



“personal health networks also address individual patient characteristics to determine the best wellness track and treatment plan. That approach, when coupled with the capabilities of the Personal health record and personal health manager, will become the key to more informed healthcare decisions,” he added.

Combining a simple personal health record with health management tools and social networking capabilities is what sets MedFlash apart from the competition. This access to comprehensive information and interactive care creates an engaging platform that educates users about their health and helps them make educated decisions.

“The escalating cost of healthcare cannot be controlled without implementation of successful disease management programs,” said Dr. Carlson. “The only way to do this will be with the full engagement of the patients themselves. Pilot programs for patient integrated disease management have already been funded and launched nationally. The potential to incorporate this technology will enhance success and lower support costs.”

Connectyx also expects future partnerships with Google Health and Microsoft HealthVault to expand its reach and scope of use.

“It is very possible that, in the future, consumers will fill all their prescriptions via something like a Google Health,” said Robbins. “But there is still the need for the PHM and other aspects of MedFlash, which is why we will partner with Google, Microsoft and others to extend that information to the consumer.”

Privacy has also been a significant consideration in the development of MedFlash. For example, users have the option to block individuals from seeing specific information on the USB flash drive or web portal.

Too, many believe that security concerns will most likely dissolve once users become acquainted with their personal health record. In fact, the CHCF reports that privacy concerns declined by nearly 50 percent once respondents actually began using a personal health record.

A Multi-faceted Approach

Primarily a consumer product, MedFlash is currently available at the pharmacy counters of Walgreens locations in Orlando where Connectyx is testing its first 60 second television spot. It is also available at select Fred Meyers, Harris Teeter and many other retailers throughout the U.S.

While retail pharmacies constitute a large segment of their target market, Connectyx isn't limiting its scope to consumers. The company has also identified organizations that could benefit from MedFlash and have taken a proactive approach to marketing it as such.



“Membership organizations are a strong market for MedFlash, specifically those that are lifestyle and leisure based,” said Schuman. “Travel clubs are an excellent example. People who travel regularly are already aware of the dangers involved, especially if they travel alone. Having health information readily available will greatly benefit them.”

To ensure success in the association market, Connectyx is also addressing the unique challenges membership organizations face with renewals through exclusive branding opportunities designed to increase the organization’s exposure. By branding the MedFlash USB with the organization logo, consumers are continually reminded of the organization and are more likely to renew their membership.

It is also useful as a promotional item for healthcare and pharmaceutical companies. These organizations can take branding one step further by including health and wellness information related to their product or drug within the flash drive, such as reminders and tips on how to keep cholesterol low.

“MedFlash is ideal for all Americans receiving healthcare today,” said Schuman. “However, penetrating the mass of health and wellness information inundating consumers today is a very real challenge; one Connectyx is tackling head on.”

Connectyx also sees value in pursuing opportunities within the provider market. Recent stimulus funding and mandates within healthcare reform have brought personal health records front and center among physicians, hospitals and health systems that are seeking stimulus funding for the adoption of certified Electronic health records under the American Recovery and Reinvestment Act (ARRA). In fact, they are required to provide patients with PHRs by 2013 in order to meet the ARRA criteria for meaningful use, as they are currently proposed.

“Billions of dollars are being allocated for medical records through stimulus funding,” said Robbins. “Meaningful use is the measure of that investment. If PHMs like MedFlash get patients involved in healthcare in ways that improve outcomes, that will be meaningful use.”

This personal health record requirement will not only improve care outcomes and quality, but also cut costs for providers and patients as health and wellness improve – a mission that Connectyx also hopes to achieve with the widespread consumer adoption of the MedFlash electronic personal health manager.

Staying True to Values

With a constant barrage of healthcare messages targeting consumers, it is easy for a product – even one as impactful as MedFlash – to get lost in the noise. But Connectyx believes that its product, coupled with the company’s desire to genuinely impact quality of life, makes the difference.

“How does our product compare to others?” said Schuman. “It’s our values. We want to make MedFlash effective at improving health and wellness, but also ensure that it is something everyone can access by keeping it affordable and easy to use.”



These values have been a driving force in the company since its inception, resulting in a product that has changed the paradigm of the personal health record industry by fully addressing consumers' wants and needs. They can be seen in the MedFlash product and in the focus on keeping the company lean and flexible.

Says CEO Shuman: "For Connectyx, it is not about fancy devices and top dollar marketing, it is about connecting people to the information they need to live healthier lives."