Simplicity and Healthcare Technology: The Grand Challenge

By ARLENE HARRIS

GreatCall, Inc. founder Arlene Harris is often called "the first lady of wireless." In 2006, she launched Jitterbug, in partnership with Samsung, to provide America's baby boomers and elders with an easy-to-use cellular phone along with uncomplicated, reasonably priced services. GreatCall, Inc. received the 2008 ASA Business & Aging Award (small business category).

Since Jitterbug was launched nearly three years ago, reporters, analysts, technologists and prospective investors have repeatedly asked me, "What in the world possessed you to come up with something like Jitterbug?"

Frankly, I am surprised when someone asks this question. It seemed obvious to me that something simple and familiar, married to new ideas, was needed to fill a big gap in the cellular phone market—namely, older adult consumers who had been forgotten.

Technocrats who create "because they can" are competing in a race to be the coolest kid on the block. But the introduction of new, small and ever more complex cell phones has translated into the disenfranchisement of millions of people. Marketing focus has been on younger sensibilities, and before Jitterbug, very little was being done to address the *whole* market for cellular service.

The Jitterbug deal with Samsung was nothing short of a miracle, and an exercise by Samsung of extraordinary leadership.

FOCUS ON SIMPLICITY

Advances in cellular phone electronics underpin greatly expanded utility (like the features provided by iPhone and Blackberry). With the advent of the big, important applications of music and e-mail as foundations, many other services are now finding their way to our phones. In fact, phone calling for the younger crowd is now a secondary or even tertiary value, again often outdone by music, e-mail and e-mail's cousin, text messaging.

In contrast, Jitterbug has been carefully and steadily focused on our specialty of familiar simplicity. This specialty, coupled with our helpful services, provides our underlying value-added benefits.

Jitterbug is actually several years behind the introduction of ring tones and cameras as cool, added-value features. Why? Because remaking the experience that would create the foundation for a more robust service offering was Job One: Phones needed to be phones first and do that job really well so that we could serve the often befuddled and frustrated consumer.

The long-term challenge, however, has always been to bring our customers loads of optional benefits but in a way that they can comfortably understand. Once the basics are presented clearly, the phones and related services can be personalized for customers and their families.

Ultimately, the high-tech, cutting-edge technology that provides entertainment to today's

kids can and will be repackaged to deliver lifestyle-enhancing experiences to those seeking Jitterbug-style simplicity. With the current focus on health, and with the coming tidal wave of baby boomers, repurposing and deploying the latest technology to improve health (and cost) management are vital priorities for Jitterbug—and for America.

TECHNOLOGY FOR FUTURE HEALTH

One of the most important, life-changing applications of technology that will directly affect consumers over the next decade involves the convergence of healthcare and communications. These two enormous industries are fraught with regulation and longstanding practices that often defy common sense. They both enjoy the benefits of billions of dollars of research and development that drive their offerings forward, but for consumers, it all just gets more complicated.

But some of the technology coming our way very soon will help and, in some cases, is astonishing. Currently, there are myriad examples of how wired and wireless services can help us stay healthy, regain health and live independently. Communications systems, private and public networks like the Internet, will be critical in making many of these health advancements workable and accessible by both consumers and practitioners.

CHANGE IS COMING

The pressure to change our healthcare system is coming from several directions. The Obama Administration has set its sights on important reforms and spending. The emphasis is on utilizing better applications of technology to increase efficiency, and to change the outcomes derived from healthcare spending. The Administration's approach will clearly include reform that places incentives on wellness instead of treatment.

Besides consumers, other stakeholders include insurers, hospitals, doctors, and employers—who pay much of today's costs. Everyone will be affected and incentivized to participate in the solutions that will inevitably come.

Jitterbug will be part of the solution. Our long-term plan is to provide a friendly environment in which others who are focused on healthcare can submit their delivery solutions in partnership with us. Jitterbug has an integrated web presence, operator services and a comfortable phone platform that can support most functions for delivering health and lifestyle-enhancing features.

Along with customer-friendly policies and practices, Jitterbug seeks to expand its strengths by becoming an informed partner in a shared and trusted relationship with consumers. Building on Jitterbug's simplicity-based values, we began this process in the last year by developing several health management initiatives.

JITTERBUG FOR HEALTH

In a trial program with a California-based, multistate, million-member managed care organization, Jitterbug is providing a supervised communications and case management program to 150 high-risk patients. This program is designed to simplify and increase the communications between patients and the managed care organization's case managers, nurse triage and membership services teams.

Upon discharge from the hospital, patients are given customized Jitterbug phones that allow direct access to key contacts, such as a patient's case manager, for follow-up care instructions. This results in improved patient satisfaction levels, accessibility to healthcare providers and reduced emergency room and hospital admittances by more than 10%. Our partner gets great economic benefit for their Medicaid, Medicare and other government-sponsored patients, while preventing just one unnecessary emergency room visit pays for the monthly Jitterbug service for all 150 trial participants.

Another Jitterbug test program is a medication reminder service. Customers' medication and prescription information is entered into a secure, HIPAA-compliant management system that triggers consistent calls and alerts to customers and ensures that their prescribed regimens are followed correctly. Escalation to family or care providers gives another level of support. Over a six-month period, the service has improved medication adherence from less than 40% to 75%.

Jitterbug's Health and Wellness services lineup now offers a nationwide nurse advice line called LiveNurse, which provides two-hour unlimited access to registered nurses and care ad-

vice whenever customers have questions or need information about their health and wellbeing. The service, provided in English or Spanish, is available daily, along with 24-hour access to a prerecorded health information library that features current information on hundreds of general health topics.

CHALLENGES AHEAD

We at Jitterbug know that the challenges currently facing our nation are formidable and many. With healthcare reform, validating methods of *prevention* needs to be the ultimate objective. It is clear that with obesity and resulting ailments rising alarmingly, our priorities have been set for us: The cost of treating people is becoming too big a burden to support.

Peoples' independence and quality of life are threatened by unhealthy behaviors that can be altered with proper support and incentives. We'll need every tool we can muster to help effect solutions, and Jitterbug is truly committed to this process. Technology and service-minded companies like ours need not only to help consumers sort through options, but to implement relevant technology that helps people to live healthier lives. Illnesses need to be treated and consumers must take more responsibility to do their part—but technology can help us all. ❖

Arlene Harris, founder and chairwoman of GreatCall, Inc. has more than 35 years of experience as an entrepreneur, board member and investor in a number of successful companies in wireless-related businesses. Harris won industry-wide acclaim in May 2007 when she became the first female inductee into the Wireless Hall of Fame. For more information on Jitterbug's products and services, visit www.jitterbug.com.

Healthcare Technology's Bright Promise

The enormity of the looming healthcare reform challenge is mind-boggling. While (expensive) medical treatments have advanced and given us many wonders, poorly conceived monetary incentives have perpetuated a system short on accountability.

Today's system tends to support an unrealistic belief among healthcare consumers that one's health can simply be "fixed" after it is broken while others pay, like car repairs after an accident. This view, which fosters unhealthy behaviors, must change.

We consumers need the right incentives, married to the right technology. We also need big doses of education and behavior modification to ensure that we can afford quality services throughout our lives—especially as we age (when healthcare costs soar). The alternative is grim.

NEW TECHNOLOGY OFFERS HOPE

There is hope. Technology that supports prevention and fosters better health outcomes abounds: Genuine science-based solutions, frequently astonishing in nature, are coming from thousands of bright minds working in national and international start-up companies and institutions.

Proteus Biomedical, based in Silicon Valley, Calif., is working on a tiny, inexpensive sensor that can be embedded in pills. This nontoxic sensor can reveal when patients take their medications (and when the pill is dissolved in the body), and will eventually report on drug performance.

PhiloMetron, a company in San Diego, Calif., is developing a disposable patch monitor that will measure the number of calories burned. The monitoring patch is bleeding edge (a term that refers to very new, unperfected technology), flexible-printed electronic plastic circuitry. A Minneapolis firm, Soligie, makes this as a palatable human solution—a device that patients can wear without its detection.

Another California company is working on what might be called "an accelerometer on steroids." Accelerometers are already used in the fitness industry to count strides. This new technology—much like the collision-monitoring technology in our cars—allows for a wearable device that continuously records an individual's physical movement and reports on unexpected motion-related events, like falls.

All of these products have several things in common: Since they're portable, they require portable energy sources. They also require wireless communications to relay the information

they create. Typically, the data is analyzed centrally by computer systems (probably connected to the Internet) with trends and exceptions guiding subsequent actions.

HIGH TECH, HUMAN TOUCH

The impacts of this advanced—and advancing—technology upon people working in the healthcare system are not as obvious. Applying these new technologies will change the way healthcare professionals, providers and practitioners execute their benevolent missions. Everyone must be exposed to and trained in the new technologies, their processes and their uses.

With advancement in DNA sequencing and in tracking medication efficacy, drug protocols will be personalized. Consumer behaviors will be far more manageable if near real time information is available about how food choices affect health. A patient's predispositions to conditions such as diabetes, exacerbated by poor eating habits, could be pinpointed before they cause actual illness.

Technology that allows for invisible, no-bother monitoring of the habits of elders and other at-risk populations, will yield data on pattern recognition, physical readings and crisis alerts. This information will help caregivers to respond proactively and appropriately to patients. When intelligently applied, this sensor-based care monitoring will enhance quality of life and substantially reduce healthcare costs for those living independently or in care facilities.

REACH FOR THE DREAM

All of this portends a change in attitude. We each must take responsibility and apply solutions that we know work—solutions that emphasize living independently, staying off medications and out of the hospital. President Obama has highlighted the challenge, and the dream is within our reach. The United States can create the most effective healthcare system on earth: With our strong collective will and brainpower, Americans can lead the way to a healthier planet. ❖

—Arlene Harris