Denise Myshko and Robin Robinson

INNOVATORS' Corner

From apps to wearable devices, technology is helping drive connected health.

The lines between connected health, mHealth, and telemedicine continue to blur as technologies continue to improve and provide a more seamless interface between patients, healthcare providers, payers, and health information technology companies.

To keep up with the pace of change and further the mission of improving health with information technology, HIMSS and the National eHealth Collaborative have joined together to expand initiatives.

NeHC's education programs will be integrated with the NeHC University and Resource Library on HIMSS's website. NeHC members have become HIMSS members. The NeHC board of directors is tasked with appointing a volunteer advisory committee to help shape the agenda of the new HIMSS Center for Patient- and Family-Centered Care, reinforcing the importance of and commitment to this transformation set of programs.

"NeHC leadership is excited to come together with the HIMSS Foundation and to be part of the recognized leader in the health IT field," says Kate Berry, NeHC CEO. "This is a wonderful opportunity to leverage and build on the capabilities and strengths of the two organizations and our many members to drive progress that will ultimately benefit patients."

Another third-party association of note is the Wireless-Life Sciences Alliance (WLSA), which is a special-purpose trade organization committed to accelerating the adoption of innovative healthcare technologies. The community includes CEOs, senior-level executives, entrepreneurs, companies of all sizes, foundations, educational institutions, scientists, physicians, and policymakers. The WLSA is dedicated to creating value and improving health, globally, by stimulating the implementation of technologies that empower consumers and innovative institutions.

WLSA partners and companies all over the world are using wireless and connected health innovations to better manage chronic conditions, pre-empt disease, and improve the lives of the elderly and under-served populations.

To support mainstreaming mHealth efforts, the mHealth Alliance leverages the game-changing potential of mobile technology in pursuit of transformed health outcomes. To this end, the mHealth Alliance brings together experts from every side — health, government, technology, development — to spark new connections and drive collective action for mainstreaming mHealth. Hosted by the United Nations Foundation, the mHealth Alliance's founding partners include the Rockefeller Foundation, Vodafone Foundation, the GSM Association, and Norad. The alliance powers Health Unbound (HUB), a global online interactive network and knowledge resource center, and serves as secretariat to two innovative partnerships, the Mobile Alliance for Maternal Action (MAMA) and mPowering Frontline Health Workers.

The following briefs are a selection of connected health and mHealth companies, devices, tools, and services. Many of these innovations could easily fit into more than one category; for ease of reference we have positioned the following information into five sections: apps, games, M2M, mHealth, telemedicine, and wearable devices.

Apps

Almost 100,000 health-related apps for smartphones are now available on the two major mobile device software platforms, Apple's iOS and Google's Android. Medical apps have generated more than 3 million U.S. downloads on iOS alone. By 2015, an estimated 500 million smartphone users worldwide will use some type of medical app, and the global market for mobile health apps may reach $26 billion by 2017.

Early apps related to health were designed simply to track exercise or weight loss or to provide instruction on diet or smoking cessation. More recently, though, designers have begun linking smartphones' computing and display power with custom designed hardware to create functioning portable medical devices. Around 15% of these apps are designed for healthcare professionals, but most are being marketed to patients to gather, track, analyze, and transmit medical data.

For example, the AliveCor device, available for $199, slips over an iPhone and records and transmits a one channel electrocardiogram with its app.

There are now more than 100 mobile medical apps registered with or cleared by the FDA as medical devices, according to MobiHealthNews' just-updated report, aptly named: The 103 FDA Regulated Mobile Medical Apps.

Using iSonea's Acoustic Respiratory Monitoring technology, adults and children with asthma can measure their WheezeRATE, or the percentage of breathing time a person spends wheezing, as a result of their airways narrowing.

AsthmaSense Prime for Mobile Devices

iSonea's wheeze monitoring device AsthmaSense Prime, a next-generation smartphone application that serves as a personal asthma monitor, is equipped with features to

help inform users about changing asthma risks based on symptoms, triggers, medication usage, and environmental factors — pollen, weather, and air quality — that can amplify symptoms or provoke an attack. In addition, AsthmaSense Prime has the ability to automatically incorporate wheeze measurement data when used with AirSonea, a smartphone-enabled device for monitoring wheeze.

iSonea is turning smartphones into medical devices, enabling anyone, anywhere, at any time to monitor breathing distress symptoms. iSonea's proprietary Acoustic Respiratory Monitoring devices have been cleared for use by the FDA, the Australian TGA and the European Union CE.

iSonea is an emerging medical technology company developing non-invasive devices and mobile health apps to improve the management of chronic, costly respiratory disorders, such as asthma and COPD.

For more information, visit isoneamed.com.

Withings Aura is a bedside device that records the sleep environment from a sensor that slips under the mattress to monitor sleep patterns and cycles, which is connected wirelessly to an app that allows the user to personalize wake-up and fall-asleep programs.

Aura Sleep App

Withings' latest app, the Aura, is an active smart sleeping system with the intention of improving the way people sleep. Using data obtained over time, Aura provides light patterns and sounds that will encourage a better night's sleep. The device includes its own companion app that connects to an iPhone.

"Sleep is such a vital part of a healthy balance that we challenged ourselves to create a product that could be used not only to analyze and monitor sleep, but also to positively impact the experience," says Cédric Hutchings, co-founder of Withings.

The sleep app joins Withings' product ecosystem of lifestyle-friendly devices, such as the Smart Body Analyzer, the BloodPressure Monitor, the SmartBaby Monitor, and the Withings Pulse.

For more information, visit withings.com.

Care4life teaches participants about diabetes and helps them manage their disease.

Care4Life App Extends Diabetes Management Program

Voxiva recently launched a mobile app for its Care4life diabetes program, which provides education and support to people with type 2 diabetes. The app uses content developed in collaboration with the American Diabetes Association, evidence-based behavior change methods, and a personalized approach.

The app is available as a free download for iPhone and Android phones. In a recent study of Care4life users, 85% said the app helped them remember to take medications and attend doctors' appointments; 62% reported achieving exercise goals they set; and 31% reported achieving weight goals.

According to Voxiva CEO Justin Sims, in addition to checking blood glucose levels, Care4life also focuses on self-care activities, which are an important part of getting patient readings where they're supposed to be.

Voxiva's Care4life product portfolio combines evidence-based health guidelines, state-of-the-art behavior change expertise, and digital technology to promote maternal and child health, adult health and wellness, smoking cessation, and diabetes self-management.

Voxiva's services combine text messaging, mobile Web, and mobile applications.

For more information, visit voxiva.com.

The iCancerHealth app is part of Medocity's virtual cancer care platform that bridges the gap between the clinic and home.

iCancerHealth Coordinates Care for Cancer Patients

Medocity's new mobile flagship solution — iCancerHealth — is an intuitive, interactive, and customizable application designed with the unique needs of cancer patients in mind. The app puts a variety of innovative tools at the patient's fingertips to help support managing key aspects of care at home. The app enables the creation of reports based on the information entered, which can be emailed or printed out for discussion at the next appointment. The easy-to-use tools include a health tracker to monitor treatment progress and make note of any side effects; a virtual medicine cabinet to keep track of medications and alert when refills are needed; and a medical and personal diary. More tools will be available in future updates.

For more information, visit medocity.com.

iBlueButton and ICEBlueButton Address VA/Medicare Records

Humetrix's iBlueButton and ICEBlueButton apps allow patients and caregivers to take advantage of the federal Blue Button initiative to make electronic medical records available to everyone.

The iBlueButton app lets consumers download their Blue Button health records from Medicare, VA, insurance plans, and EMR patient portals directly to their Android or iOS smartphone and tablet. They can also share them with their doctor via a voluntary push of those records from their own device to their healthcare provider's iPod, including other vital medical records such as x-ray images.

For more information, visit humetrix.com.

The iRx Reminder app allows for real-time mobile data capture for clinical trials.

iRx Reminder Collects Data in Real Time

iRx Reminder is a complete, full-featured application that collects data research in real time. The iRxReminder Smartphone app and Web control center provide a solution for researchers, practitioners, patients, and study participants. Simple Web management of content allows medication schedules, surveys, and intervention activities to be sent to an individual's smartphone.

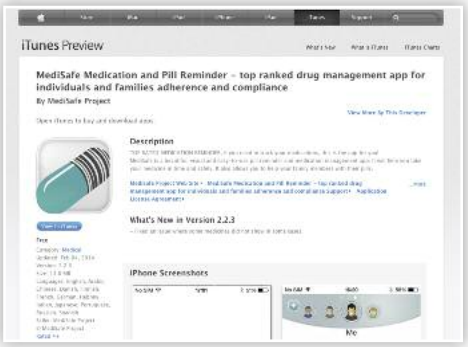
A control center is used to set up patient medication schedules, surveys to follow changes in attitude, and tasks to follow physical attributes. All data are sent in real time to the control center, without the patient having to access the Internet or a computer.

iRx Reminder, which collects research data on medication adherence, physical information, behaviors, attitudes, or mood allows researchers to enter and track medication schedules, deploy electronic physical data diaries, or schedule questionnaires to assess behavior or attitude change. The system is being used to study heart disease, stroke recovery, medication adherence, stress in caregiving, and rural HIV support.

For more information, visit irxreminder.com.

MediSafe Medication Reminder

MediSafe — a virtual pillbox — is a cloud-synced mobile adherence app that reminds users when it's time to take their medication. MediSafe also sends alerts to selected family members, friends, and caretakers when the user misses a dose. Aggregated patient behavior data, physician trends, and other market aspects are available to help pharmaceutical companies better understand how people receive and take their medications. For example, after analyzing 1.7 million medication consumptions across the nation, MediSafe's geographic findings show that Fort Lauderdale, Fla., has the worst medication adherence rates in the country, and people between 20 and 29 years of age have the worst medication adherence rates in regards to demographics on a national scale.



MediSafe is a visual and easy-to-use pill reminder and medication management app.

In early 2014, the system will become accessible to people without smartphones, via an automated phone system and SMS. Patients will be able to record medication doses via touchtone, and caretakers will be able to receive alerts via incoming, automated calls when patients appeared to have missed a dose.

For more information, visit medisafeproject.com.

Poimapper supports devices ranging from low-cost feature phones for basic questionnaires to smart phones and tablets for complex questionnaires.

Poimapper — Patient Monitoring App

Pajat Solutions, a mobile software solutions company, has developed Poimapper as an enterprise grade mobile data collection and management app for collecting general health data and flexible patient monitoring in field situations. Poimapper enables clinicians to visualize the collected data, create reports, and therefore, improve decision-making. Data can be collected both offline and online and managed across all devices and users of an organization.

Data can be easily transferred to central health records and the solution can be extended to support on-device risk assessments. Poimapper enables mobile health workers in either rural or built up areas to have secure access to existing patient data even in off-line situations and to send updates directly from the field.

For more information, visit poimapper.com.

RxPhoto's 3D image selection can catalog more than 300 anatomy areas.

RxPhoto Manages Clinical Photographs

RxPhoto, from AppwoRx, is a mobile health solution for clinical photography, which is an important part of medical care. Physicians use photos to track and communicate patient treatment and progress, facilitate inter-office referrals, supplement insurance claims, illustrate services, and engage patients.

The AppwoRx platform catalogues more than 1,000 patient photos and now includes new solutions for referral management, telemedicine, provider collaboration, lead generation, and customer support. The app can catalogue 3D images and integrates photos directly to a patient's electronic health record. The app allows for direct messaging with patients, and provide patients with reminders and questionnaires. The app also allows physicians to coordinate care in real time via computer or mobile device.

For more information, visit myappworx.com.

SensiMAT for Wheelchairs is a thin mat containing pressure sensors that send pressure data to a mobile device, where proprietary PressureRisk algorithm sends an alerts when there is a high amount of built up pressure, and facilitates and tracks pressure relieving exercises.

SensiMAT App

The SensiMAT for Wheelchairs is the first and only mobile app that can facilitate pressure-relieving behavior. The SensiMAT for Wheelchairs is a thin mat containing pressure sensors that are inserted underneath a gel, air, or foam cushion. These sensors send pressure data to a designated mobile device, where SensiMAT System's proprietary PressureRis algorithm alerts the patient when he or she has a high amount of built up pressure, and needs to shift position. The app also facilitates and tracks pressure relieving exercises.

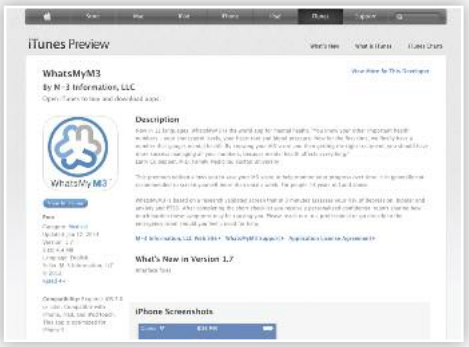
SensiMAT Systems is a digital health company that is dedicated to bringing assistive devices for wheelchair-users to market through the use of mobile technology.

For more information,
visit sensimatsystems.com.

WhatsMyM3 Aids in Mental Illness Treatment

WhatsMyM3, a mobile app, whatsmym3.com, an Internet-based screen, and M3Clinician.com, a browser-based portal, from M3 Information provide physicians with a validated, patient-rated, multidimensional, care coordination tool that screens for behavioral health conditions, including depression, bipolar, anxiety, post-traumatic stress, and substance use disorders.

M3 Clinician uses secure mobile health



Now in 12 languages, WhatsMyM3 is the world app for mental health.

and Web-based technologies to deliver behavioral health risk assessments and progress tracking information to consumers. The M3 team of mental health professionals is comprised of expert researchers and clinicians, who along with others, focused on a feasible but powerful solution to empower primary care practices with a tool that would reduce missed cases and the subsequent mistreatment and help coordinate an engaging review of symptoms with their patients. Each step of the M3 process is designed to facilitate constructive patient engagement, taking a naturally complex set of symptoms and problems and organizing it for efficient clinical decision support. M3 Clinician provides an individualized patient assessment geared toward early detection, co-morbid illness, and identifying people in distress irrespective of their particular diagnosis. Meanwhile, its dimensional subscores help to place patients on a clinical map, leading the clinician toward the appropriate diagnosis. M3 Clinician facilitates longitudinal monitoring and communication among the care team members in a medical home environment.

For more information,
visit m3clinician.com.

Games

Gaming in healthcare is a rapidly developing industry within digital health, which aims to bridge the gap between medicine, entertainment, technology, and education.

According to Digitome, to be classified as such, a game must be entertaining while at the same time achieving a given health benefit. Games for health are available in all forms imaginable — online, video game consoles, CD-Rom/DVD, computer, mobile, television, board games, and others. It is important to distinguish healthcare games from gamification of healthcare, which refers to using elements such as social capital, targeted incentives, and other factors to drive behavior modification leading to healthcare gains in real life. Games addressing healthcare problems often use principles of gamification but these principles can also be used outside of traditional games.

"Points and badges are to engagement what page numbers are to literature; you can put page numbers in a car manual, but that won't make it Shakespeare," says Ayogo CEO Michael Fergusson. "Meaning and self-efficacy are the keys to engagement. Patients must recognize themselves, and see how they can move forward."

Empower Motivates Patients with Gaming

Ayogo Health is applying game play and social mechanics to patient engagement. The company's portfolio of customizable applications engage, educate, and empower patients to engage with their care plan, improving health and financial outcomes for insurers, pharma, and healthcare providers.

One game is Empower, which helps patients who are newly diagnosed with a chronic condition to take control of their disease and treatment.

Another Ayogo game is GoodLife, a customizable platform that uses a proven fusion of tailor-made gamification components, incentives, and social features that will entice and motivate consumers to take the necessary steps toward real-world health benefits.

For more information,
visit ayogo.com.

PlayForward Seeks to Prevent HIV Infection

Schell Games, a full-service game design and development company with a focus on creating transformational games and interactive experiences, has partnered with Yale University to develop a game for the iPad aimed at preventing HIV infection among ethnic minority adolescents. PlayForward provides an engaging and informative experience that focuses on decision-making. Players navigate through an interactive world encountering a series of life-altering choices along the way.

For more information, visit play2prevent.org or schellgames.com.

Sparx Video Game Addresses Mental Health

LinkedWellness, an e-therapies company aimed at providing effective, user-friendly, and clinically proven solutions to people suffering from behavioral health conditions in the United States, has launched Sparx, an interactive video game that helps people with mild to moderate depression.

Sparx was developed by a team of child and adolescent mental health professionals and therapists, research psychologists, game developers and e-learning theorists at the University of Auckland Medical School with feedback from young people.

Sparx has been scientifically evaluated and has been found to be effective, affordable and appealing to its young (ages 12-19) users.

Among the adolescents participating in the clinical trial, the remission rate for those using the game was 43.7%, while the remission rate for those receiving face-to-face therapy was only 26.4%.

For more information, visit linkedwellness.com.

Machine to Machine

Machine to machine (M2M) refers to technologies that allow wireless and wired systems to communicate with other devices of the same type. Today, M2M data modules are extremely sophisticated and come with an array of features and capabilities such as onboard global positioning (GPS) technology, flexible land grid array surface mounting, embedded M2M optimized smart cards, such as phone SIMs, known as MIMs or M2M identification modules, and embedded Java, an enabling technology to accelerate the Internet of Things (IOT).

IOT refers to uniquely identifiable objects and their virtual representations in an Internet-like structure. The term Internet of Things was proposed by Kevin Ashton in 2009. The concept of the IOT first became popular through the Auto-ID Center at MIT and related market analysis publications. Radio-frequency identification (RFID) was seen as a prerequisite for the IOT in the early days. If all objects and people in daily life were equipped with identifiers, they could be managed and inventoried by computers.

Besides using RFID, the tagging of things may be achieved through such technologies as near field communication, barcodes, QR codes, and digital watermarking.

With a shortage of physicians, reimbursement rates cuts and millions of newly insured patients entering the system, the healthcare industry must leverage new technologies to manage the imbalance.— AirStrip CEO Alan Portela.

AirStrip Helps Physicians Make Better Decisions

AirStrip delivers a vendor-neutral and data source-agnostic enterprise solution for clinical mobility. The company's interactive clinical applications, technology platform, and professional services enable clinicians to interact with and respond rapidly to live, clinically relevant patient health information.

AirStrip One enables the rapid and secure exchange of information required for clinical decision-making. It is FDA-cleared as a diagnostic aid and can bring together disparate data sources from multiple vendors, bringing all live relevant data to the clinician's mobile device to provide a more complete picture of patient health.

"Implementing an enterprisewide mobility strategy is critical to supporting a new era of care focused on reduced readmissions and improved clinical outcomes," says AirStrip CEO Alan Portela. "By delivering clinically relevant patient data to caregivers no matter where they are, mHealth enables faster, more accurate clinical decision making, even when the physician is outside the hospital."

For more information, visit airstrip.com.

AM3 mHealth Interoperability

Agile Edge Technologies provides Agile Mobile Medical Management (AM3), which delivers mHealth device interoperability and cross-platform analytics. AM3 integrates and manages multiple devices and remote platforms from multiple manufacturers. It standardizes all device data in a HL7 compliant storage architecture and provides user-configurable views (portals) of device biometric and patient data.

For more information, visit agileedgetech.com.

Cue-me to Reach HCPs

The Cue-me platform developed by Openstream uses context delivery architecture to provide context-aware, multimodal applications that can be authored, managed, secured, and deployed independent of the device/OS type. A Cue-me based healthcare portal application targeted to the healthcare provider community is being used by a leading multinational pharma, according to the company. The solution provides access to aggregated content from external information and community sites, learning, and research information as well as courses and tools for consumption purely targeted to the HCP community.

Cue-me's open-standards based platform, available on all Smartphone, tablet, and desktop devices, enables natural interaction with applications in a device independent way. Users can take advantage of simultaneous multimodality, through the convenience of speech, touch and key press to naturally interact with applications and situational context.

For more information, visit openstream.com.

EHR Software for Smaller Practices

WDean Medical, a developer of medical software and Web services centered around electronic health records for small to medium ambulatory practices, has medical practice software solutions, including electronic health records, practice managements, patient portal and communicator, and medical practice websites. Its Patient Communicator, a patient portal, allows patients and practices to communicate with each other. The Patient Record is the agency's core EHR product. It contains the patient's chart and all interfaces to it. The Practice Manager is software to run a medical practice. It interfaces with all of the other components for patient care and communica-

tion. The Practice Site is the external website for the business of the practice.
For more information, visit wdeanmedical.com.

Integron and Qualcomm Life Enter Into M2M Partnership

Integron, a M2M deployment services company, specializing in helping clients design, deploy, and manage wireless M2M solutions, has entered into an agreement with Qualcomm Life to provide comprehensive telemedicine deployment services for the 2net Ecosystem of wireless health collaborators.

Integron has developed practice specialization in home telehealth/remote patient monitoring, critical asset monitoring, remote service, and billing solutions. Qualcomm Life provides a wireless solution for chronic disease management and reliable sharing of medical information.
For more information, visit integron.com.

KORE Powers Patient Monitoring Worldwide

KORE is one of the world's largest wireless network providers specializing exclusively on the rapidly expanding global M2M communications market. Providing unified control and management for cellular and satellite network service delivery in more than 180 countries worldwide, KORE empowers its application, hardware, and wireless operator partners to efficiently deliver M2M solutions for connected devices across the globe. M2M Remote Patient Monitoring can put an expert on the spot almost anywhere in the world or allow a doctor to monitor a patient from almost anywhere that patient lives or travels.

KORE has partnered with leading healthcare technology companies to provide integrated and optimized M2M healthcare applications services. For example, a remote patient monitoring solution provider can provide comprehensive connectivity for patients using remote monitoring devices, allowing the patient to travel to more than 170 countries worldwide without incurring expensive roaming overages.

Pharmaceutical companies are increasingly studying the use of wireless technologies during clinical trials, reducing error rates and ensuring that participants take dosage on schedule. This more rapid testing completion during clinical trials helps to deliver new medicines to the market faster and more cost effectively.
For more information, visit koretelematics.com.

MedSignals is a medication management system that reminds, monitors, communications, and reports medication adherence in easy-to-read formats to authorized remote care managers.

MedSignals Management Platform Goes Beyond Reminders

MedSignals and VitalSignals combine a suite of wireless monitors, reminders, and communicating devices that alert users and their care teams about medication adherence and health status. MedSignals is a four-drug pill case monitor that tracks medication adherence by lid openings. MedSignals also serves as a gateway for Bluetooth-enabled vital sign monitors to transmit recorded readings along with meds taken, in real-time. MedSignals relays data with its embedded cellular SIMs to the company's Adherence Engine in a cloud-based server. With point-and-click ease, the device can be set online, manually, or through its 24x7 call center. Devices will flash, beep, and speak aloud (in many languages) to alert patients when and how meds or self-tests should be taken. Adherence reports — SmartCharts — are sent from the server via email, text, fax, EMR link, or automated phone call, as preferred for each recipient. The VitalSignals portfolio includes a Bluetooth precision scale, glucose meter, blood pressure monitor, and pulse oximeter. These VitalSignals devices transmit through the MedSignals hub to provide a comprehensive view of the user's health.
For more information, visit medsignals.com.

Medivo Provides Access to Patient Records

Medivo is a health-monitoring platform connecting doctors, consumers, and clinical labs. With access to clinical data and advanced analytics through its own lab results search engine, and proprietary lab analytics services, Medivo enables providers to monitor patients between visits, and for patients to get tested, understand results, and measure and track health information. Its search engine LabSpot gives healthcare providers access to more complete patient and practice-level profiles sourced from more than 150 labs, while its suite of mobile apps allow increased patient engagement and lab testing compliance. Medivo has acquired two disease management apps in two years: OnTrack Diabetes and WellApps.
For more information, visit medivo.com.

MediVu Makes Patient Data Visual

MediVu is a visualization and communication company that develops intuitive user interfaces that support the decision making process of a specific job function in a facility. Its technology is a new method of interacting with patient data, as it is not presented in the traditional alphanumeric format. MediVu uses graphical information because it says the human brain absorbs graphical information 60,000 times faster than textual information and retains it much longer. MediVu also connects clinicians to patient information buried in their EMR and other systems. Hospitals are also able to leverage existing EMR investments to tackle their healthcare delivery challenges in a cost effective manner by using the MediVu technology. MediVu says its solution changes the focus from record keeping and billing, to clinicians delivering great service focused on the patient, and achieving targeted outcomes for hospital clients.
For more information, visit medivu.com.

MobileSmith Builds and Deploys Custom Enterprise Apps

MobileSmith is a patents-pending mobile application platform that enables organizations to rapidly create, deploy, and manage custom, native smartphone and tablet apps deliverables across iPhone and Android platforms with no prior knowledge of software programming. MobileSmith enables organizations to get to market quickly with unique self-built mobile apps that drive business value.

The solution allows companies to seamlessly integrate their app portfolio with their enterprise systems and securely manage all mobile apps from a single cloud-based environment.

The MobileSmith Platform also serves as a back-office for secure management of an organization's entire portfolio of apps, pushing real-time notifications, and easy real-time app updates without re-submitting to the app stores.
For more information, visit mobilesmith.com.

Nonin Bluetooth Oximeter

Nonin Medical has developed the Nonin Bluetooth Smart Model 3230 finger pulse oximeter for eHealth/OEM applications.

Bluetooth Smart simplifies device pairing and has a lower power draw than Bluetooth classic technology. The device and the system pair automatically.

The 3230 also features a new large screen with a graphic interface that guides the patient in proper use of the device using Nonin's exclusive CorrectCheck technology.

Another new feature is SmartPoint capture, an algorithm developed by Nonin that automatically determines when a high quality measurement is ready to be wirelessly transmitted. This helps to ensure that each reading transmitted by the Model 3230 is accurate.

Nonin is also testing new Bluetooth technology for regional oximetry to monitor patients at risk of losing oxygen to their brains during surgery or recovery.

For more information, visit nonin.com.

Nonnatech provides the ability to monitor loved ones from a computer or phone as well as view live video.

Nonnatech Remote Senior Monitoring

Nonnatech is a hands-free assistive and remote monitoring technology that enables senior living communities staff or caregivers to remotely view and review actions and behaviors of a senior at home or in assisted living. The system can inform staff of potential health issues such as side effects to medications, depression, sleep apnea, change in temperature, sedentary behavior, and changes in activities of daily living such as eating, sleeping, toileting, or socialization. The Nonnatech system allows caregivers to have a better grasp of the overall care being given and the ability to check in on seniors remotely. In addition to being able to receive unlimited alerts and notifications via e-mail and text messages, staff and caregivers are able to review and keep track of information on its software on a daily, weekly, monthly, and yearly basis. Lights and small appliances such as lamps, radios, and televisions can be turned on or off with time parameters that can be set by the user or others.

Lights and small appliances can also be controlled by other activities, such as sitting in a chair, opening a door, or getting out of bed in the middle of the night. For example, the technology can automatically turn on lights when someone gets out of bed in the dark. Users can also have televisions, radios, etc. turn on by sitting in their favorite chair or wheelchairs. A caregiver can remotely turn off stoves and other appliances if they see the resident has forgotten to do so. These devices can be controlled via smart enabled devices and personal computers. The Nonnatech system is a wireless plug and play system that allows streaming video over a standard broadband connection regardless of the modem/router combination.

For more information, visit nonnatech.com.

Swissmed Mobile Enables Global Real-Time Health Monitoring

The Swissmed Mobile MedM Platform supports more than 40 medical devices, eight smartphone platforms, and is open for EHR integrations. The system uses the mobile phone as a mediator for transmitting data from sensors to healthcare systems. This allows using low-power and low-emission communication technologies like Bluetooth 4.0 or NFC to gather data from sensors, achieving global service availability using an existing mobile network infrastructure.

The software supports a variety of sensors, including monitors and meters for blood pressure, blood glucose, ECG, oxygen saturation, weight, and fetal monitoring. Servers provide a basic monitoring interface for caregivers, and services are ready to be integrated into other medical information systems with the ultimate goal to make real-time health monitoring data part of the electronic patient medical record.

For more information, visit swissmedmobile.com.

Wyless Joins Global Library Initiative

Wyless, a global M2M managed service company, recently joined the International M2M Council (IMC), a global organization that promotes the benefits of machine-to-machine communications. Wyless, which works in partnership with the world's largest network operators, provides secure, reliable communications with wireless devices in more than 120 countries, offers real-time reporting and control over all devices connected to the network. The company will contribute to the IMC's first major initiative: the development of a library of M2M content, including in-depth user case-studies that will inform businesses about the benefits of M2M technology in various vertical markets.

"One of the things we appreciate most about the IMC is that it is prepared to carry its message globally," says Dan McDuffie, CEO of Wyless. "Many of our partners require solutions with a multinational footprint, and our industry group needs to reflect that."

For more information, visit wyless.com.

Vital Sign DSP for Mobile Devices

Lionsgate Technologies has developed a universal interface — Vital Signs DSP (Digital Signal Processor) — that transforms smartphones, tablets, and laptops into mobile medical diagnostic tools capable of real-time vital signs monitoring. Using standard medical sensors connected directly through the universal audio port of virtually any mobile device, the proprietary interface provides precise monitoring of blood oxygen levels, blood pressure, and body temperature that are displayed on the mobile device's monitor.

LGTmedical's technology requires no external signal processors, microcontrollers, power sources, or displays. Users just download a proprietary app that allows their mobile device to drive a low-cost standard medical sensor.

For more information, visit lgtmedical.com.

Vodafone M2M Provides International Capabilities

Vodafone M2M connects machines, devices and appliances wirelessly to the Internet, turning them into intelligent assets that open up a range of possibilities for businesses. Vodafone offers remote care services solutions in three core areas: condition management, hospital to home, and assisted living. In addition, Vodafone Global M2M Platform pro-

vides an international M2M solution integrated into 24Care's DefiCommunicator devices.

In the area of clinical research, Vodafone M2M health solutions offer a more effective way of collecting data to speed up testing and compliance, reduce development time and enhance the quality of information used in bringing a new and effective treatment to market.

For more information, visit m2m.vodafone.com.

VoiceFirst Reduces Charting Time by 50%

VoiceFirst by Honeywell provides innovative clinical workflow solutions to mobile clinicians to reduce time spent at computers and away from patients. By leveraging a revolutionary voice capability, clinicians empowered with VoiceFirst are able to spend more time at the bedside, reduce charting time by 50%, and realize better clinical outcomes. VoiceFirst is a hands-free voice technology that overlays clinical workflows in any EMR. Clinicians can be completely mobile while using voice to retrieve data or document care. VoiceFirst's software technology application overlays on top of a hospital's existing EMR system and allows clinicians to interact with their EMR by using their voice. This enables charting directly into the EMR and pulling data from the EMR without ever having to touch a keyboard. Clinicians can have a conversation with their EMR while being completely mobile and free to focus on patient care.

For more information, visit voicefirstsolutions.com.

mHealth

mHealth initiatives provide life-sciences companies with a wealth of opportunities to connect with patients, physicians, caregivers, pharmacists, and other audiences. Access to mobile services is wider than ever and mobile use is projected to grow significantly.

To leverage that potential, life-science companies launch mHealth initiatives that combine thoughtful strategic planning, strong stakeholder support, and objectives that align mobile technology with company goals. Successful programs ultimately meet user needs while addressing key issues such as improved patient adherence and increased brand awareness.

"It's a constant challenge for busy physicians and other clinicians to remain knowledgeable about advances in their specialty area and effectively answer questions from their patients during office or hospital visits," says Robert Stern, CEO of @Point of Care360.

@Point of Care360 Bridges the Gap Between Patient and Clinician

@Point of Care360 provides a streamlined practice-based tool to allow for the delivery of content at the clinician's fingertips. The platform aims to bridge the gap between clinician, patient care, and data by providing a way to improve adherence, patient outcomes, and engagement between the patient and clinician.

For the physician, the system also provides a real-time reference tool, journal articles, trial information, drug information, and best practices. For patients, there is an app that is synced with the clinician platform. It also provides access to education and helps to facilitate self-care.

Two of its iPhone/iPad apps focused on multiple sclerosis (MS) treatment and management have been included in Healthline Networks' 2013 survey of the 14 Best Multiple Sclerosis iPhone & Android Apps. Last year, the company teamed up with Intel to bring its apps to medical professionals who use Windows-based devices.

For more information, visit atpointofcare360.com.

BodyGuardian Remote Monitoring System

Preventice has licensed the remote monitoring algorithms for the BodyGuardian Remote Monitoring System from the Mayo Clinic. The BodyGuardian RMS detects, records, and wirelessly transmits physiological data to support remote monitoring of non-lethal, cardiac arrhythmias in ambulatory patients. Data are transmitted to the Preventice mHealth platform, where it can be stored for later retrieval. The BodyGuardian sensor adheres to the patient's skin and is smaller than a cell phone, giving patients complete mobility and freedom to go about their normal lives without restriction.

Physicians and medical professionals can securely view the captured medical information anytime, any place on devices such as the iPad, or online. Physicians can retrieve patient data and reports, or choose to receive alerts based on changes in select biometrics.

For more information, visit preventice.com.

"Detailed interactive audio and visual instructional prompts allow a patient to be trained and guided through any medication administration process in real time in front of a computer or mobile device," says Adam Hanina, chairman and CEO of Ai Cure Technologies.

Facial Recognition to Improve Adherence

Ai Cure Technologies has developed facial recognition software for smartphones and tablets to automatically confirm medication adherence in clinical research. This ensures the right patient is taking the right medication at the right time without the need for direct human supervision.

The HIPAA-compliant suite of software solutions has been designed to monitor oral, sublingual, injectable, and inhaler medications. Importantly, the platform may be quickly, easily, and efficiently integrated into a clinical trial without a change to the manufacturing process.

For more information, visit aicure.com.

1EQ is breaking down the barriers and rebuilding a highly personalized connection between patient, physician and wellness.

Genome and Lifestyle

1EQ helps illuminate the connection between a consumer's genome, lifestyle, and environment. By providing a unique space for consumers to translate health data, 1EQ guides them with a simple, engaging way to

optimize wellness. Based on genomic, clinical and lifestyle data, this app supplies a provider-curated shortlist of important action items. Consumers will know exactly what they have to do and, along with the provider, can monitor progress.

For more information, visit 1eq.me.

"Through a smooth, easy-to-use touchscreen interface and simplified tools, CareConnect removes all technology barriers, making it the perfect partner for independent living and peace of mind," says Tim Zinn CEO of Ceretec.

CareConnect For Seniors

Ceretec provides CareConnect, a solution that allows seniors to stay seamlessly connected to their loved ones and offers in-home monitoring, medication management, and critical health monitoring support whenever necessary.

The product is a communication and home healthcare platform featuring a standalone, family communicator that supports simplified messaging — email and text, one touch video chat, and photo streaming, personal alert response, medication, and appointment management, and 24/7/365 activity monitoring.

"CareConnect allows seniors to stay seamlessly connected to their loved ones and offers in-home monitoring, medication management and critical health monitoring support whenever necessary," says Tim Zinn, CEO of Ceretec.

For more information, visit careconnect365.com.

Connected Wellness

A&D Medical has developed a line of products to help consumers connect their every day lives to what is healthy. The company's line of activity monitors, weight scales, and blood pressure monitors help consumers to check their progress as they work to maintain or improve overall health. The company provides monitors that connect to a smartphone, tablet, or personal computer and allow them to collect, store, and view healthcare information.

A&D Medical also has designed a suite of products to support a company's corporate efforts in improving the health of employees, and in turn improving the overall health of an organization. The company has a line of connected activity monitors, weight scales, and blood pressure monitors to provide employees with quick feedback regarding their progress toward maintaining or improving their health and well-being.

For more information, visit andonline.com/medical.

When people adopt activity into their lives through engaging programs it benefits everyone — employees, employers, and the healthcare systems. — Dave Monahan

Health and Fitness Monitoring

FitLinxx develops enterprise health and wellness technology that motivates people to live actively and improve their well-being. Sold exclusively through partners, its wireless activity monitors, health devices, and software help people track and measure daily activity levels and health indicators such as weight and blood pressure. In addition, its fitness facility solution helps members adopt exercise habits that achieve health, wellness and fitness goals.

"According to the CDC, chronic disease like obesity, diabetes and heart disease account for 63% of all U.S. health issues and are predominantly caused by unhealthy lifestyle choices like sedentary behavior, poor nutrition, and smoking," says Dave Monahan, CEO of FitLinxx.

For more information, visit fitlinxx.net.

Happtique Provides for the Care Continuum

Happtique provides mHealth solutions for the entire continuum of care. The company's virtual marketplace and distribution platform allow for the discovery, display, and delivery of apps, documents, and videos. The company aims to elevate the standards of medical, health, and fitness applications through its certification program for app developers.

For healthcare providers, the company aims to improve patient engagement and create efficiencies by prescribing digital health content to patients.

For more information, visit happtique.com.

MDChat Connects Physicians

Designed for healthcare professionals by healthcare professionals, MDChat is the first HIPAA-secure online communications platform designed to improve workflow productivity within and between healthcare environments. Offering secure, point-to-point, real-time access to other healthcare professionals — physicians, nurses, support staff, and administrators — via any computer or mobile device, MDChat is an on-the-go communications tool that can improve patient care and outcomes and increase productivity.

MDChat can be integrated into an existing electronic medical records system, scheduling software, or image database for a complete patient information solution. MDChat was developed by neurosurgeon and entrepreneur John Abrahams, M.D., who founded Mobile Health One.

Dr. Abrahams says this is not Facebook for physicians. This is a new model for workflow productivity in the healthcare industry. It unifies professionals within and between organizations into a collective communications environment that will ultimately lead to better patient care.

For more information, visit mdchat.com.

Mobile Commons Offers Interactive Mobile Marketing

Mobile Commons is a Web-based platform enabling companies to build interactive mobile marketing campaigns that can be set up in minutes, connecting with people on their mobile phone. Clients determine all of the content and scheduling of their messages that are sent through its targeted mobile solutions. For example, in the healthcare sector, the New York City Department of Health used Mobile Commons to create a citywide anti-smoking campaign. Messages of encouragement alternated with tips. Heavy smokers who received the messages were more than twice as likely to quit than those who did not (53% vs. 25%). The California Department of Public Health responded to the H1N1 crisis by creating a statewide resource of vaccination clinics. Thousands of people texted in to find the closest vaccination near them. Of those, 33% went to the recommended clinic, and an additional 40% planned to get vaccinated later.

Planned Parenthood Federation of America lets teens chat live with health counselors over text.

For more information, visit mobilecommons.com.

Mobiquity Creates Branded Applications

Mobiquity, a mobile engagement provider, offers a customizable enterprise-class software product called Velocity that gives a company the ability to create branded interactive mobile applications that support live meetings, events, and training sessions, increasing productivity, participant involvement, and workforce effectiveness.

For more information, visit mobiquityinc.com.

Nutrition Tracking

BettrLife is a technology solution that gives healthcare providers a way to engage their patients to take control of their own health and wellness through an integrated suite of food, nutrition, and activity tracking tools.

In December, the company included a new Smart Logging functionality for individuals to easily log all aspects of their daily food and nutrition routines directly from its mobile app and Web portal. The product promotes user engagement by intuitively suggesting foods that are eaten most often, allowing complete meal logging in only a few easy clicks.

"Combined with our planning, activity tracking, and virtual health coaching features, BettrLife has the flexibility to meet the needs of evolving wellness programs," says BettrLife CEO Don Schoen.

For more information, visit bettrlife.com.

Outcomes Solutions Addresses Lack of EMR Connectivity

Zoeticx has developed healthcare industry software designed for the new healthcare landscape ushered in by Obamacare and the changes within the medical industry. Its software is dedicated to improving patient outcomes, enhancing the quality of care, containing costs, and simplifying administration. The software suite also aims to improve healthcare industry profitability by curtailing medical errors and reducing preventable deaths. The Zoeticx solution is comprised of four modules: CareIntelligence, CareSynergy, CareHistory, and CareCompliance. The suite also addresses the issue of lack of connectivity between EMR systems.

"By applying some of the automation technology already used by other industries, but in a way specifically designed for the special needs of the healthcare industry, we know hospitals will save on resources and improve patient outcomes, simply by allowing healthcare providers to focus what is most important, the patient," says Thanh Tran, CEO of Zoeticx.

For more information, visit zoeticx.com.

"Our patient engagement platform ensures that the entire health team is connected for the patient when they leave the provider," says Yingo Yango Founder Marty Jaramillo.

Patient Engagement Platform

Yingo Yango is a mobile patient engagement platform that integrates health and wellness care teams, wellness programming, and resources for employers and providers. The on-demand, health prevention and wellness platform facilitates greater balance and health in people's lives.

According to Yingo Yango's founder, Marty Jaramillo, the solution not only empowers the patient to become more accountable, it helps facilitate treatment, medication and protocol compliance.

For more information, visit yingoyango.com.

Propeller Asthma Mobile Device Monitors Inhaler Use

Propeller Health has developed a mobile platform for respiratory health management that uses a snap-on, Bluetooth-enabled sensor on an inhaler to track how, when and where patients are using it. The Propeller sensor wirelessly syncs with the patient's smart phone using Bluetooth. By downloading a Smartphone app, the patient and doctor can then track how often the inhalers are being used along with the location and time-of-day. Patients can also track their triggers and symptoms and learn more about their asthma over time. Personalized feedback and education can be sent to the patients' phone based on their symptoms, and medication reminders and alerts can be setup.

In turn, the data collected enables doctors to identify patients who are at risk or need more help controlling symptoms. This allows them to potentially prevent attacks before they happen, saving them the cost of hospitalization or a trip to the emergency room.

For more information, visit propellerhealth.com.

RxApps Manages Care Through Text Messages

RxApps supplements standard management of chronic illness using customizable text message prompts to track patient health, experience, and behavior metrics that influence outcomes. This information informs both patients and providers about what is effective in treatment, what lifestyle factors may be difficult for the patient to change, and whether the patient is at risk for adverse clinical events such as a hospitalization. Self-monitoring and increased communication with care providers improves treatment outcomes in chronic illness. The RxApps service also drives behavior change by reminding patients what new habits they are supposed to be forming as part of their care plan. RxApps extends care management into the home using personalized Web apps and SMS self-monitoring; its first application addresses mental health.

For more information, visit rxapps.com.

"CareMerge's mobile/Web solutions are breaking silos in healthcare by connecting various stakeholders like providers, patients, and families through relevant and meaningful workflows, and reducing the use of phones and faxes," says Asif Khan, founder and CEO of CareMerge.

Senior Care Management

CareMerge provides a set of Web and mobile apps for communication and care coordination for senior living communities. The company's solutions bring everyone together

in providing care for seniors to create a more resident-centered environment and are accessible through PC, tablets, and mobile devices. Task-oriented care alerts and reminders are relevant to each care provider, so best proactive real-time measures can be taken for seniors.

For more information, visit caremerge.com.

Smart Pill Bottles Improve Adherence

AdhereTech makes smart patented pill bottles to improve medication adherence and patient engagement. These bottles automatically measure how many pills a patient takes and when he/she takes them. If a dose is missed, AdhereTech reminds the patient via automated phone call or text message, as well as via on-bottle lights and chimes. The service comes with a patient feedback and engagement platform as well. The firm recently began a clinical trial with The Walter Reed National Military Medical Center, and will start a number of additional trials this year.

"Low medication adherence is an enormous problem, and it negatively affects all parties in healthcare, from patients to pharma," says Josh Stein, AdhereTech CEO. "Our goal is to partner with pharma companies to distribute high-cost meds in our bottle. Our service will increase adherence, refills, and ultimately revenues for the pharmaceutical company, and we will charge pharma for this service. It will be free for patients."

For more information, visit adheretech.com.

Social Code Founder Siobhan Bulfin started the company after her sister survived breast cancer; she wanted to create a way for patients to connect with supporters, fellow patients, and care providers.

Social Code Patient Guidance Platform Improves Health Behaviors

Social Code is a health startup that helps patients adopt and maintain positive habits for chronic disease prevention and management. The platform combines social media, mobile technology, tracking tools, gamification, and data analytics to keep patients on track with their treatment. Social Code makes it easier for patients to remember to take their mediation and provides social incentives to stay on track.

It also opens up communication with their physician. Health issues addressed with the platform include smoking cessation, drinking less alcohol, getting fit, overcoming depression, adhering to medication, rehab after an injury and eating well. A Web and mobile platform called Goalpost helps users achieve goals by breaking them down into incremental steps and focusing on achieving them with guidance and support from friends and experts.

For more information,visit socialcode.io.

"Synapse simplifies the very complex process of identifying current and future super-users and intuitively creates customized treatment plans based on patient data," says Tom Boosinger, CEO of Synaptic.

Synapse Uses Patient Data to Predict Behavior

Synaptic Advisory Partners, developers of cloud-based population health management solutions, developed the population health and care management application, Synapse. The solution is based on marketing's data-mining strategy or risk stratification, which allows providers to identify a patient's future healthcare needs based on current behaviors. This information empowers providers to create interventions that affect behavior changes, which in turn will impact the patient's health and subsequently drive down healthcare costs.

For more information, visit synapticap.com.

Tactio Offers Self-Monitoring Solutions

Tactio Software designs and builds multi-touch, cloud computing mobile software applications and systems that provide software for patients to self-monitor at home, using its mobile devices. AppObjects is the software foundation to the Tactio Mobile Health Ecosystem. Tactio Software R&D is performed in partnership with doctors, pharmacists, health-monitoring device manufacturers, and patients who are using mobile apps to self-track their health. One Tactio clinical app allows the overview and management of multiple patients as well as many other remote patient monitoring features. Tactio's patient app is built on Tactio's mobile health tracking experience that delivers home health tracking of body weight, blood pressure, heart rate, diabetes, cholesterol, and more.

For more information, visit tactiosoft.com.

The U.S. market for advanced patient monitoring systems more than doubled between 2007 and 2011. Today it represents one of the fastest growing market segments with a forecast of reaching $20.9 billion by 2016. — Robert Arkin, CEO and founder of Sensiotec.

Virtual Medical Assistant Provides Non-Contact Remote Patient Monitoring

Sensiotec, a wireless digital technology provider, has released Virtual Medical Assistant (VMA) a non-contact remote vital signs monitor, offering an invisible, non-wearable system to measure heart rate, respiration rate, bed occupancy, and movement. VMA allows healthcare providers to access real-time and trend data that can be sent to any remote device.

"With half of all U.S. hospital beds completely unmonitored and many more undermonitored, Sensiotec developed VMA to fill this gap by providing a remote patient monitoring solution that will drastically increase remote monitoring for hospitals and healthcare providers," says Robert Arkin, CEO and founder of Sensiotec.

For more information, visit sensiotec.com.

Warfarin Remote Management

FlexLife Health is a remote patient management (RPM) company focused on monitoring services for the care of chronically managed patients. The company's initial product is a two-way anticoagulation management system (AMS). Clinicians prescribe the service and actively and remotely manage the patients' warfarin dosage on a weekly basis instead of having the patient come to a clinic to have blood drawn.

For more information, visit flexlifehealth.com.

Wellet Program Targets College Students

Wellet, a wellness program designed for universities and their students, offers digital tips, nudges, and reminders about fitness, stress management, and illness delivered by email, text, or mobile app. Wellet encourages participation with points and college-specific

Wellet shakes hands with just about every social media outlet in a meaningful way, meeting students where they already live and giving them the chance to, for example, tweet to their friends that they just learned something amazing, share photos of the big salad they ate on Instagram, or whine to Facebook that the run they just finished was hard.

rewards and prizes for making change and sharing. Wellet was created using behavior modeling, which states that three elements — motivation, ability, and a trigger — must come together for a behavior to occur.

Wellet engages with a question that leads to a tip. It opens a conversation to learn more, dig deeper, or take action. It invites students to read and respond, post and tweet, play games, take quizzes, plan activities, share results and connect with their university's health resources. It's a tool designed for universities that helps students create habits that add up to a long life of good health.

For more information, visit wellet.com.

Telemedicine

Telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve a patient's clinical health status. Telemedicine includes a growing variety of applications and services using two-way video, email, smart phones, wireless tools, and other forms of telecommunications technology.

While the term telehealth is sometimes used to refer to a broader definition of remote healthcare that does not always involve clinical services, the American Telemedicine Association (ATA) uses the terms in the same way one would refer to medicine or health in the common vernacular. Telemedicine is closely allied with the term health information technology (HIT). However, HIT more commonly refers to electronic medical records and related information systems, while telemedicine refers to the actual delivery of remote clinical services using technology.

According to Jonathan Linkous, CEO of ATA, telehealth use in the United States alone is expected to double in the next two years.

Innovators are doing their part to further bolster consumer demand by producing a range of services to complement popular tools like WebMD's symptom checker. Such rapid growth will be greatly facilitated by a flexible and adaptable regulatory regime, however, the FDA has indicated that it will not extend formal oversight to mobile healthcare services that are not transformative medical apps or accessories to medical equipment. As such, innovative and engaging tools will likely proliferate, piquing interest among a broader swath of the population and likely resulting in greater awareness of the benefits of using high-speed Internet connections for healthcare purposes. According to one source, $80 billion could be saved annually by enabling the wide-spread use of electronic healthcare records.

1DocWay Telemedicine for Mental Health

1DocWay is a Web-based videoconferencing technology that enables real-time interaction between a provider of psychiatric services and a patient. The system aims to aid telepsychiatry, in which a patient sees a psychiatrist through online video conferencing, making access to quality mental healthcare easier and personalized for a patient.

The company aims to increase access to mental health services for underserved and rural populations including geriatric, child, and immigrant communities specialized behavioral health resources. It can help overcome barriers to mental healthcare delivery, including geographic distances, high-treatment costs, transportation difficulties, and time limitations.

For more information, visit 1docway.com.

"We want to enable patients to stay better connected to their providers between visits, more compliant to therapy, and more engaged in their healthcare management," says Kent Dicks, CEO and founder of Alere Connect.

Alere Mobile Link Connects Physicians and Patients

Alere Connect develops remote health monitoring solutions that deliver streamlined cost-effective connectivity across patient, care provider and electronic medical records. The company's devices provide a gateway to the Alere CloudCare platform, a health information platform and suite of cloud-based tools that enables healthcare practitioners to extend their services to a broader patient population.

One product, Alere MobileLink, is used in chronic care management programs to allow patients, self testing at home, to easily send collected test results to their healthcare providers. The company in January 2014 received FDA approval for Alere HomeLink, which will be deployed in health management programs administered by Alere Health for patients managing chronic conditions, such as diabetes, hypertension, heart failure, and chronic obstructive pulmonary disease. It is also approved for OTC use with glucose meters, blood-pressure monitors, weight scales, and pulse oximeters.

"Our goal is to keep patients out of the hospital by monitoring them at home," says Kent Dicks, CEO and founder of Alere Connect. "Ultimately this can bring down costs by keeping the patients out of the hospital."

For more information, visit alere.com.

"More effective and efficient care models using mobile health solutions must be utilized to meet these massive challenges," says Danna Kehm, managing director of HealthInterlink.

Beacon Provides Remote Patient Monitoring

HealthInterlink, a provider of remote patient monitoring software applications, has introduced Beacon, the company's flagship product that incorporates FDA-cleared, wireless patient monitoring devices and a gateway device — tablet or smartphone that transmits physiological data, answers to questions, and messages to Beacon Clinical Care Access 1.0 (Beacon CCA) for review by healthcare providers. Beacon CCA is a flexible and intuitive software application that helps clinicians prioritize patient care, allow for early intervention and facilitates communication with patients in their home.

"The population is aging and chronic diseases are reaching epic proportions," says Danna Kehm, managing director of HealthInterlink. "Incorporating Beacon into the healthcare delivery model provides a proactive solution for tracking outcomes, reducing costs and improving patient care."

For more information, visit healthinterlink.com.

eCaring Manages Senior Health at Home

eCaring generates actionable real-time healthcare data from a patient's home. It enables home health aides, caregivers, and patients to enter behavioral, clinical, and medication adherence data, which the system integrates and configures alerts. eCaring enables hospitals, healthcare providers, payers, and families to keep people in their homes and out of the hospital, by communicating vital in-home care information as it occurs, to: intervene early to prevent significant deterioration; substantially lower care costs while improving quality of care; and reduce hospital and ER admissions.

"Through the data we generate per patient per month — up to 1,000 data points on behaviors, vital signs and medication adherence — pharmaceutical companies as well as managed care organizations can use data mining to better understand patient treatment and outcomes," says CEO and Founder, Robert Herzog.

For more information, visit ecaring.com.

MyHealthPoint Improves Communications with Clinicians

Entra Health Systems offers MyHealthPoint, a health and wellness management toolkit, including portals for patients, caregivers, and clinicians, mobile applications, electronic health record interfaces, and advanced data analytics and visualization. The platform helps improve user health by better managing wellness goals, automatically collecting remote biosensor information, and providing comprehensive care team communications.

For more information, visit entrahealthsystems.com.

SafeIX Application Platform Facilitates Doctor-Patient Communications

Datuit has developed the SafeIX Application Platform, which is designed to allow patients, family, and healthcare providers to share information safely and securely. The platform's first app, the Datuit Care Plan Manager, incorporates a patient's problems, goals, interventions, medications, and advanced directive.

"We believe that by putting the patient and family at the center of the care plan, they can receive richer, more personalized information from a variety of sources to better meet their needs and understand their health," says Sandra Raup, president of Datuit.

For more information, visit datuit.com.

Trapollo Remote Health Monitoring Solutions

Trapollo, a service provider of remote health monitoring managed services for chronic disease management, independent living, and employer health and wellness programs, currently supports thousands of video-enabled in-home monitoring devices nationwide for large insurance providers, hospitals and health systems, and government agencies. Additionally, Trapollo is focused on marketing its services to senior and assisted living communities, and self-insured employers.

Trapollo draws from its broad portfolio of products and services to design and implement programs that cover every stage of the remote health monitoring lifecycle, including but not limited to: product selection and acquisition, program financing, asset and logistics management, in-home installations, user training, monitoring, triage services, customer and technical support, and patient-to-patient transfers of the equipment. Trapollo is a national telehealth and remote health monitoring solution integrator bundling consulting, technology products, data management, implementation and supply chain services to develop turnkey programs for clients.

For more information, visit trapollo.com.

Tyto Care Conducts Medical Checkups

Tyto Care, a mobile-health platform and device, can perform an almost complete checkup of the body, and send the results to the doctor, who will be able to make a prognosis without seeing the patient in person. The device is planned to be on the market in 2014 for around $200. By pointing the Tyto at various parts of the body, it can measure temperature, check heart rates, inspect skin and other organs, and evaluate the physical changes and abnormalities, which could indicate illness. The information gathered can then be sent via the Internet to a physician.

The device stores the photos and audio in high definition, and then sends it the doctor's PC, smartphone or iPad, allowing him to analyze the data and decide if the patient has a medical condition.

For more information, visit tytocare.com.

Viewcare Keeps Patients at Home

Viewcare, a provider of end-to-end e-healthcare solutions, has a vision that seriously ill patients with chronic diseases should be able to live at home instead of being hospitalized. The in-patient can stay at home, being provided with the exact same supervision and treatment as if hospitalized at the hospital through Viewcare telemedicine services. Viewcare solutions include a highly scalable hosted IT infrastructure supporting high quality video conferencing, natural, non-delayed audio conferencing, fully operational apparatus (on in-patient premises), access to conventional hospital systems, secure and QoS managed broadband connection, communication devices with one or no buttons and more. Delivered as a service to the hospitals and service providers and installed on patient premises by the ambulance driver, the Viewcare telemedicine platform is currently used by community services in Denmark for patients suffering from COPD and type 2 diabetes.

Viewcare also supplies a full range of integrated telemedicine services to facilitate a clinical trial investigating the safety and efficacy of treating COPD exacerbation in the patient's own home as an alternative to admitting the patient to hospital.

For more information, visit viewcare.com.

Vivify Health Supports Accelerated Home Care Interventions

Vivify Health delivers, through common and non-proprietary consumer mobile electronics, a cloud-based, device-agnostic, and ecosystem-connected remote care management platform to enable its provider and payer-based customers to impact a great deal of their overarching strategic objectives.

Vivify partnered with AirStrip at the AT&T Foundry to develop a remote care information platform featuring bi-directional data sharing via a near real-time, single point of access to a comprehensive source that can improve clinical workflows and expedite care decisions. AirStrip and Vivify will lead as key data sources, allowing health application developers to incorporate the Vivify and AirStrip data.

"By expanding data sources to both at-home and inpatient settings, Vivify can better risk stratify cardiac care discharges, while our partnership with AirStrip enables near real-time care coordination with complete patient context to support immediate clinical decisions," says Eric Rock, CEO of Vivify. "Together, AirStrip and Vivify are committed to deploying a solution that leverages their leadership in mobility, patient engagement, and scalability to improve outcomes in the home setting while impacting avoidable hospital readmissions."

For more information, visit vivifyhealth.com.

VMware Cloud Suite Enables IT-as-a-Service

VMware has launched new and updated offerings to its portfolio of management solutions purpose-built for the cloud era. These solutions — VMware vCloud Automation Center 6.0, VMware vCenter Operations Management Suite 5.8, and VMware IT Business Management Suite — help customers enable IT-as-a-Service. In addition, VMware has updated the automation and management capabilities of VMware vCloud Suite 5.5.

For more information, visit vmware.com.

VSee Telemedicine Kit Geared for Remote Care

VSee is a proprietary low-bandwidth group video chat and screen-sharing software tool. The telemedicine kit is designed to be lightweight, waterproof, and tough so nurses, interns, or humanitarian workers going to a village could simply toss the kit into a boat without worrying about anything getting broken or waterlogged.

VSee telemedicine has native integration to medical devices that can send real-time medical images and readings from ultrasounds, dermascopes, otoscopes, stethoscopes, EKG monitors, or other devices. The service allows multiple users in various locations to communicate in real-time by video and audio. Its interface is able to concurrently display video faces and allow users to annotate on shared screen content. VSee sends video at rates as low as 50 kbit/s and is capable of real-time video communication over 3G cellular networks. VSee Telemedicine requires less than half than the bandwidth of Skype, Vidyo, and OpenTok, and is field-hardened for the most limited networks. VSee is FDA-registered and HIPAA-compliant and communications are secured via end-to-end 256-bit AES FIPS 140-2 compliant encryption.

For more information, visit vsee.com.

ZephyrLIFE Advances Transitional Care

Zephyr Technology released its ZephyrLIFE, a remote monitoring system designed specifically for the growing market of transitional care. ZephyrLIFE increases safety, reduces never events, and assists clinicians in providing care in hospitals, skilled nursing facilities, and homes. Using wearable sensors, wireless communication to the cloud and advanced workflow based algorithms and data display, ZephyrLIFE saves costs, and increases revenue. Deployed in multiple hospitals, ZephyrLIFE has been used to aide in fall and bed sore prevention, enhance sepsis detection and assist in remote titration of care.

For more information, visit zephyranywhere.com.

Wearable Devices

Mobile once referred simply to phones, then tablets too — and now it includes all kinds of wearable devices like smart watches, health trackers, and Google Glass. According to Cisco, thanks to all of the new gadgets transmitting info, the amount of mobile data being used is expected to skyrocket by 2018, with mobile data traffic topping 190 exabytes worldwide. One exabyte is equivalent to a billion gigabytes. This would be an 11-fold increase from 2013's traffic.

To put that in perspective: 190 exabytes of data is the same as 42 trillion images, or 4 trillion video clips. It's also 190 times more than all Internet Protocol traffic — both "fixed" wireless connections and mobile combined — generated in 2000.

As that mobile data use expands rapidly, so will the number of devices sucking up all that information.

Cisco expects the number of mobile devices and connections to jump from 7 billion in 2013 to 10 billion by 2018 — 1.4 times more than the 7.6 billion people the United Nations predicts will be living then.

It's jaw-dropping growth, and one of the major factors is the wearable devices trend: the rising popularity of wearable technology, including smart watches like Pebble, health and fitness trackers, Google Glass, and more.

While Cisco lumps these devices into the M2M category, which includes other systems like GPS, we are separating out some of the new technologies for ease of reference. The M2M category made up about 1% of mobile data traffic in 2013, and Cisco expects this figure to reach 6% by 2018.

Specifically, Cisco predicts the number of wearable devices in use will jump from less than 22 million in 2013 to almost 177 million by 2018.

"Over the last 60 years, the number of people living alone has steadily increased, notably among seniors," says Nasrin Dayani, executive director, AT&T ForHealth. "Solutions are needed to offer true independence and freedom for this healthy aging population as well as those living with chronic conditions."

AT&T EverThere Wireless Fall Detection

AT&T ForHealth has launched AT&T EverThere, a small wearable device, that can detect falls and quickly identify location. The device can detect a fall and automatically connect to a 24/7 call center for response and support, using the AT&T wireless network.

The device is hands-free and allows two-way voice communication with the call center for fast assistance. The device also offers GPS location service that helps first responders determine where a fall has occurred.

For more information, visit corp.att.com/healthcare/solutions.

ECG Monitoring System

Cardiac Designs has developed a clinical-

"The ability for consumers to have access to this type of diagnostic tool is the key to creating a helping people take more control of their heart health and to collaborate with their care team, wherever they are and whenever they want," says Karim Marrouche, president and co-founder of Cardiac Design.

grade, low-cost consumer-focused ECG management platform that improves the accessibility of critical medical diagnostic information relating to cardiac health.

The ECG Check monitor is a self-initiated ECG capture device conveniently built into a protective smartphone case, beginning with the Apple iPhone and extending in the near future to Android smartphones. Combined with the ECG Check monitor is an iPhone application for user interaction, collection, storage, and transmission of ECGs. The ECGs collected can be submitted to the cloud-based ECG Check Web Center for analysis, personalized ECG/report archiving and data management. The ECG Check Analysis Engine is available for automated interpretation and reporting to assist users in tracking, trending, and elevating their heart health.

For more information, visit ecgcheck.com.

The HealthPatch biosensor is capable of capturing clinical-grade biometric measurements in a continuous, configurable and non-obtrusive manner using a small yet powerful patch worn on the chest.

HealthPatch MD Monitors Biometric Measures

Vital Connect recently developed the HealthPatch MD with cutting-edge sensor and chip technologies, which combined with Vital Connect's proprietary algorithms, enable the device to provide clinical-grade measurements of eight core health metrics: single lead ECG, heart rate, heart rate variability, respiratory rate, skin temperature, body posture, steps, and fall detection/severity. Additionally, the HealthPatch MD can provide intelligent health measurements.

Processing thousands of data points per minute, Vital Connect's SensorFusion algorithms analyze multiple biometrics to generate measurements that are more meaningful and accurate than any individual biometric alone.

These measurements can include stress, energy expenditure, sleep quality, and contextual heart rate, among other health predictors.

For more information, visit vitalconnect.com.

PAMSys-ECG Remote Monitor

BioSensics' remote cardiac monitoring system PAMSys-ECG tracks heart rate and heart rate variability time synchronized with posture. Using this, cardiologists can obtain heart rate information and heart rate variability as a function of physical activity, posture, and gait during and preceding a period of abnormal EKG, and gait analysis that includes speed, duration, number of steps, and intra-day variability.

For more information, visit biosensics.com.

Perminova Cardio Care Moves to the Cloud

Perminova Cardio is a cardiac electrophysiology and cardiovascular information system based entirely in the cloud. The browser-based Perminova Cardio can be accessed anytime, anywhere, and on any Web-enabled laptop, PC, or mobile device. The sensor team is developing a novel body-worn sensor for patients with chronic diseases, particularly congestive heart failure (CHF).

Perminova products are electronic surgical records systems for cardiology that aim to improve charge-capture and efficiency, while automatically producing case and billing reports. The cardio unit develops and markets Web-based software for use in cardiovascular surgery.

The sensor unit develops medical devices for remote monitoring of patients with chronic diseases. The sensor monitors patients at home, and is designed to prevent hospital re-admissions.

Worn around the neck like a conventional piece of jewelry, the sensor provides early indications of CHF with daily measurements of fluids, heart rate, heart rate variation, and respiration rate. It sends information via Bluetooth to multiple gateways, such as mobile devices and Qualcomm's 2net system.

Future versions will additionally measure complex hemodynamic parameters such as stroke volume and cardiac output.

For more information, visit perminova.com.

From a patient's wrist to a physician's dashboards, Vitall reports on activity, vital signs, medication consumption, and much more.

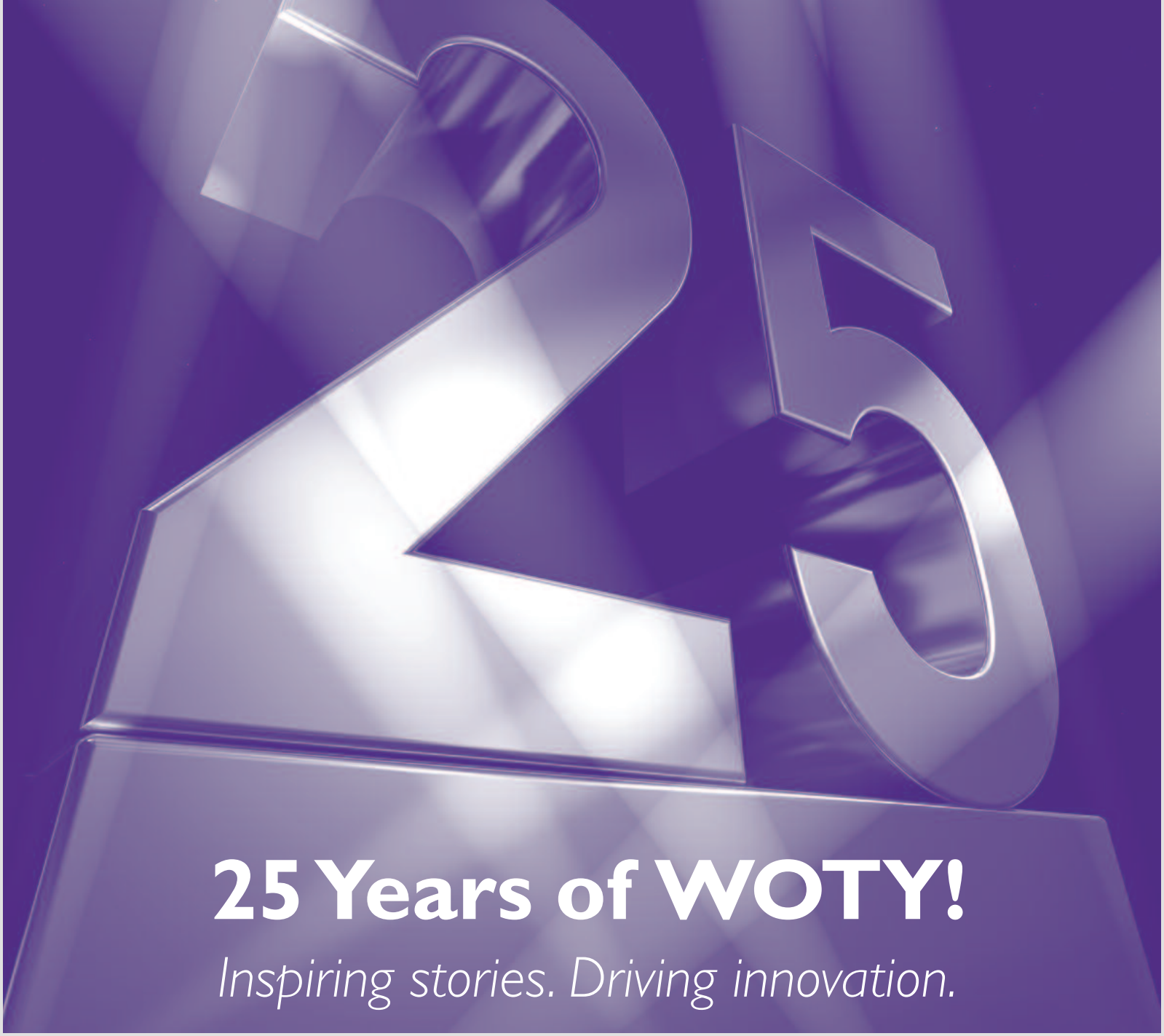
Vitall Bracelet Offers Direct Report to Physician

Vitall is a comprehensive patient-wearable healthcare monitoring wrist device that reports directly to the physician on patient activity, vital signs, medication consumption, and more, creating a complete picture of a patient's health for the physician.

The combination of biometric sensors, wireless connectivity, 3D accelerometer, and smartphone technology create an advanced healthcare "watch."

Vitall health monitoring solutions support a wide range of organizations that serve at-risk populations, including chronically ill patients who receive the majority of their care at home, patients who have been discharged from the hospital, populations with complex care needs or special monitoring requirements, and pharma organizations looking to support over the counter initiatives.

For more information, visit vitallhealth.com. PV



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