Emerging Technology for Chronic Disease Care

By Rachel Maier, MS

Come On, Get Appy!

For patients who aren’t into the wearable trend, plenty of helpful apps are available that can be installed on a smartphone. Want to track your flareups? There’s an app for that (Flaredown). Need to measure and track your heart rate? There’s an app for that (Cardio). Is keeping track of chronic pain a hassle? Not anymore, because (you guessed it!) — there’s an app for that (PainScale). From tracking diabetes or asthma to medications or mood, there’s an app for almost everything! Some are free, some are not; do a simple Internet search for “top apps for chronic disease management” to find the right one for you.

Making Everyday Easier

Wearable devices, along with apps and other products designed to take the hassle out of everyday tasks (like automated pill dispensers, voice-activated virtual health assistance and reliable at-home lab testing), are changing the way chronic illness is managed. New innovations are constantly being rolled out that help patients take an active role in managing their disease from the comfort and convenience of their own home. As researchers and developers continue to explore the potential of cloud-based technology, the sky is literally the limit for what could come next.

Data Collection and Doctor Connection

The keys to today’s successful chronic disease care include data collection and connection from a distance. Remote patient monitoring technologies build upon virtual care by collecting important vital signs and other health metrics (such as blood glucose levels) from afar. From at-home stethoscopes and blood pressure cuffs to blood oximeters and scales, smart medical devices can be configured to automatically send the information directly to patients’ doctors. When something irregular pops up, doctors are notified and can contact the patient for further discussion.

The Wearable Revolution

Patients are increasingly taking it upon themselves to track trends in their body’s health metrics and are opting for sleek, unobtrusive wearable devices — smartwatches, in particular — that make it easy for them to do so. These metrics not only help patients track and understand how their daily behaviors affect their health, but they also help catch and record episodes of abnormal symptoms. The newest models of many popular wearables now come equipped with advanced sensors and apps that enable individuals to take ECGs and test blood oxygen levels (Apple Watch Series 8, FitBit Sense 2, Garmin Venu 2 Plus, the Vital Health and Fitness Tracker and Samsung Galaxy Watch 5, among many others). But wearables aren’t limited to smartwatches: See the Shopping Guide for another innovative option.

RACHEL MAIER, MS, is the associate editor of IG Living magazine.
Digital Diabetes Coach

The BlueStar app is an FDA-cleared digital health solution that connects to blood glucose devices to provide patients with personalized diabetes support. It delivers automated, real-time coaching for individual needs and provides insights over the course of a patient’s journey. BlueStar tracks and analyzes blood glucose levels, blood pressure, food intake, activity level, sleep duration/quality, weight and medications. It requires an access code from a healthcare provider, health plan or employer for use; a prescription unlocks an upgrade to BlueStar Rx (which includes an insulin calculator).

Free, apps.apple.com/us/app/bluestar-diabetes/id700329056

Vitals Go Virtual

Oxiline specializes in top-of-the-line medical diagnostic equipment that provide accuracy and peace of mind. With seamless Bluetooth connectivity to apps on both Apple and Android devices, the Oxiline X and XS Pro series include oximeters, blood pressure monitors, glucose monitors and smart scales. Products start at $49; oxiline.shop/product/pulse-xs-pro?v=7516fd43adaa

Shopping Guide for Emerging Technologies for Chronic Disease Care

A Smarter Way to Dispense Pills

With the Hero Smart Pill Dispenser, you can create a medication schedule and dosage once, and Hero handles the rest. Hero alerts you when it’s time to take your pills with sound or a blinking light. One touch of a button sorts and dispenses your dose. This HSA/FSA-approved dispenser holds up to a 90-day supply of up to 10 medications; supports any pill shape or size; and includes an app that connects users and caregivers. Starting at $29.99/month; herohealth.com/medicare

Convenient At-Home Lab Collections

Everlywell brings credible, CLIA-certified laboratory tests to you. Everlywell’s at-home sample collection methods have been clinically validated against traditional methods to meet rigorous standards for test accuracy and reliability. Available tests include thyroid, cholesterol and lipids, heart health, HbA1c and more. Results can be directly emailed to both you and your doctor. Test kits start at $49; www.everlywell.com/products/?category=3

A Revolutionary Ring

Circular Ring is a wearable health tracker that combines red, green and infrared light to enable blood oxygenation monitoring and clinical grade heart rate accuracy. Plus, it helps you understand and improve your sleep patterns, quantifies physical activities, helps reduce stress and even offers personal alarm clocks. Water-resistant and scratch-proof, with up to four days of battery life, Circular has 10 days of built-in storage without a Bluetooth connection. Starting at $284; www.circular.xyz