

COMING SOON: CARS THAT CARE ABOUT YOUR HEALTH

BY JOE JANCSURAK MAY 23RD, 2011

Ford is getting into healthcare. The segment? Mobile healthcare, of course. How? Via Ford's SYNC in-car connectivity system (now for hands-free control of music and phone calls) and Ford's strategic partnerships with medtech companies.

Ford researchers have developed glucose device connectivity and monitoring capabilities, location-based allergy and pollen reports, and voice-controlled cloud-based health management services. They're doing this in collaboration with Medtronic (continuous glucose monitor), SDI Health (informational asthma and allergy system), and WellDoc (mobile health integrated services).

At what may have been an historic press event (only time will tell) held last week at Ford's Research and Innovation Center in Dearborn, Ford execs and their medtech partners were on hand to explain the reasons behind the efforts, show demos, and to discuss the future of in-car health monitoring.

The reasons. Ford's Global Manager of Interiors, Infotainment and Health & Wellness Research Gary Strumolo told reporters that cars are "natural devices for engagement" and "Ford wants to create cars that care." And Ford CTO Paul Mascarenas described the car as "the ultimate setting for health and wellness activities."

Ford's high-volume approach to bringing mobile health and wellness solutions inside its cars is initially targeted at diabetics and those with asthma and/or allergies.

According to the American Diabetes Association, nearly 26 million adults and children are currently living with diabetes, while the Asthma and Allergy Foundation of America reports about 60 million Americans have asthma, allergies, or both.

For diabetics and their caregivers, constant knowledge and control of glucose levels is critical to avoiding hypoglycemia, which can cause confusion, lightheadedness, and blurry vision. And those with asthma and allergies need to have a clear understanding of pollen levels in the air that can quickly lead to an attack. Growing in popularity among this group are Web-based alert services and smartphone apps that help flag dangerous pollen levels based on location.

The technology. Ford researchers have developed a [prototype system that connects SYNC, via Bluetooth, to a Medtronic continuous glucose monitoring device](#) in order to share glucose levels and trends through audio feedback and a visual display. The system will provide secondary alerts if levels are too low.

"To address the growing challenge of chronic diseases, [Medtronic](#) is collaborating with companies like Ford to develop innovative solutions," said James Dallas, senior vice president, Medtronic. "By utilizing information technology and consumer electronic devices, we can help patients actively manage their health via access to real-time data on phones, hand-held devices, or even in their cars."

To help meet the mobile healthcare needs of drivers living with asthma and allergies, Ford is working with [SDI Health](#) and <http://www.pollen.com/> to SYNC-enable its [smartphone Allergy Alert](#) app through AppLink, giving users voice-controlled access to the app that provides location-based day-by-day index levels for pollen; asthma, cold and cough and ultraviolet sensitivity; as well as four-day forecasts.



"Our developers initially created the iPhone app to provide users with greater access to the information they've come to rely on from pollen.com," said Jody Fisher, vice president of Marketing for SDI. "Having instant, portable access for their conditions helps users plan their day or week ahead so they can remain active, which ultimately improves their quality of life."

Ford and WellDoc, a recognized leader in the emerging field of mobile health integrated services, have joined forces to [integrate in-car accessibility to WellDoc's comprehensive cloud-based personalized solutions for those with asthma and diabetes](#) through SYNC Services. Using voice commands, SYNC users could access and update their WellDoc profile to receive real-time patient coaching, behavioral education and medication adherence support based on their historic and current disease information.

"WellDoc was founded on the concept of helping patients manage their disease with everyday, personal tools that are easy to use and can be easily accessed," said Anand K. Iyer, president and COO of WellDoc, who introduced himself as a type II diabetic. "Through our partnership with Ford, we've created a unique in-vehicle environment that supports patients so they can continuously maintain their daily routines without interruption."

Moving forward, Medtronic spokesman Brian Henry told Medical Design that his company will continue evaluating other mobile health applications for its remote monitoring capabilities.

And Ford's Strumolo told reporters that the car company is looking to develop seats with embedded heart rate monitors to measure a driver's stress levels. Cars could use this stress-level information, along with the driver's activity (speed, switching lanes, etc.), to make decisions to help control the heart rate, such as whether incoming calls should be permitted or whether they should go to voice mail.

Meanwhile, insurance companies are taking note of developments that enable patients to better manage their health, says WellDoc Chief Strategy and Commercial Officer Chris Bergstrom. Bergstrom says one of the "next big trends in health plans will be the Patient Centered Medical Home (PCMH)" that provide cash incentives to policy holders for achieving and maintaining acceptable BMI, cholesterol, and blood pressure levels, and other health factors. One of the leading insurers with such a program is BlueCross BlueShield Maryland with its [CareFirst](#) program.

"WellDoc fits in well to the PCMH," says Bergstrom, "because we act as a tool for enabling a patient to adhere to the physician's prescribed care plan between office visits, whether the patient is at home, at the office, and soon, in his or her car. We do this by offering the patient real-time coaching and the physician gets clinical decision support. Also, we have tools for the nurse coaches that are included in the PCMH model and directed by the physician (but paid for by the health plan)."

So it follows, then, that health insurers, as well as car insurers, may one day offer incentives to customers with chronic conditions who put themselves behind the wheels of cars that monitor their health.

As for when consumers may expect to have access to these caring cars, Strumolo said Ford is looking at possibly one to two years.

Until then, stay tuned.