Ford launches voice-activated asthma app

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By Eric Wicklund

The automotive industry has taken health IT out for a spin, and is liking the way the technology handles. The Ford Motor Company recently launched a voice-activated mobile health application, which allows drivers to monitor external allergy, flu and UV conditions. It's the latest product of a program the automaker launched last year, in which it is partnering with several mHealth companies on health and wellness solutions integrated with Ford's SYNC platform.

Company officials say the Allergy Alert app, developed by IMS Health, enables allergy sufferers to monitor outdoor conditions that may cause symptoms such as scratchy eyes, sore throat and nasal congestion.

"What the app does is give you the pollen level at your location, along with the asthma, cough, cold and UV indexes, both on the day you ask it, as well as a four-day forecast," said Gary Strumolo, global manager of Ford Research and Innovation.

The mobile health market is in overdrive, according to industry experts. One report, conducted by Juniper Research, found global medical app downloads reached 44 million in 2011, and report officials project that number will spring to 142 million by 2016. It's these market trends, experts add, that offer a driving incentive for carmakers to make mobile health a priority.

Last May, Ford launched its Car Health and Wellness Solutions endeavor and announced its first partnerships, with WellDoc, Medtronic and SDI Health, on mHealth applications tied into the SYNC AppLink connectivity platform. This January, the company launched the "Doctor in Your Car" alliance at the International Consumer Electronic Show in Las Vegas, touting partnerships with Microsoft, Healthrageous and BlueMetal Architects.

According to officials, BlueMetal Architects is working on a prototype system that would collect vital signs such as blood pressure, activity measurements and blood glucose readings, as well as behavioral data submitted by the driver or a passenger. Microsoft would create a voice and touch-screen interface and translate the data recorded by sensory devices in the vehicle, while Healthrageous would push out healthy lifestyle advice to drivers and passengers based on that data.

WellDoc, a Baltimore-based developer of chronic disease management solutions, is working with Ford to integrate its DiabetesManager System in the SYNC platform to help people with type 2 diabetes manage their disease while in their car. The integration is designed to allow diabetics to enter data such as medications, exercise and diet information through speech-to-text interaction while in their vehicle, then gain access to WellDoc’s clinical decision support tools.

Ford is also working with Minneapolis-based medical device maker Medtronic to develop a prototype glucose monitoring system for the car, allowing the SYNC platform to connect via Bluetooth to a Medtronic device to continuously monitor a diabetic driver's blood glucose levels. Since diabetics suffer disorientation and mood swings and can even lapse into a coma if their blood glucose levels are too high or low, a continuous monitoring solution offers an important driving tool and could be a life-saver.

Also, Ford is working with Plymouth Meeting, Pa.-based SDI Health and www.pollen.com to enable access through SYNC to a smartphone Allergy Alert app, giving users voice-controlled access to location-based day-to-day index levels for pollen and ultraviolet sensitivity.

The Asthma and Allergy Foundation of America reports that more than 40 million people nationwide suffer from indoor and outdoor allergies, which includes allergic rhinitis, seasonal allergies, hay fever and nasal allergies. With these glaring statistics, Ford officials say the motive behind the mobile technology really comes down to driver safety and well-being.

"One of the things that we're trying to do is to extend the notion of automotive safety," said Strumolo. "Today, if you ask someone what automotive safety means, they'd say crashworthiness – how did a car perform in a crash. But the reality is that most people go through their entire driving lives without being in a serious auto accident; if they have a chronic illness, they suffer from that every day of their lives."

Officials say the mobile application allows drivers to connect smartphones or tablets to their vehicles, and by using simple voice commands they can quickly access information without needing to take their hands off the wheel or eyes off the road.

Through the app's pollen index rating, drivers can request to hear the types of allergen conditions they are likely to encounter that may cause a flare-up in personal allergy symptoms. The app also provides a risk index for asthma, flu/cough/cold and ultraviolet rays.

Ford officials say its time the automobile industry tap into health information technology. "We want to change the paradigm that in-car connectivity systems such as SYNC can only be used for information and entertainment purposes," said Strumolo. "Health and wellness are key issues for our customers outside of the car; therefore, we want to leverage our connectivity platform to improve their time behind the wheel. The trend in mobile health is all about knowing potential health concerns before they happen so that they don't surprise a person, even while driving."

Detailed app abilities include:

- Current location updates the driver's location using the car's built-in GPS receiver to report the most accurate and up-to-date information
- Allergy provides a verbal pollen index to users that rates the severity of pollen levels in the surrounding environment on a scale from 0 to 12
- Pollen specifies that pollens are predominantly in the air
- Asthma uses a 0 to 12 scale to address potential and upcoming concerns for asthmatics
- Flu addresses the current and upcoming flu index and report
- UV tells drivers of the current and upcoming risks of UV rays

The app stores up to three ZIP codes – the default location when the driver isn't using the GPS position and two ZIP codes outside of the car's location, for such situations as a mother storing the ZIP code of her child's school.

“Mobile health apps are changing the way consumers manage their own wellness," said Doug VanDagens, global director of Ford Connected Services. “Ford SYNC provides the platform to extend this growing trend to the driving experience.”