**App Makes Asthma Management Fun for Kids**

***BY SARAH MATHEWSON***

NEW YORK—A startup tech company is preparing to launch a smartphone application (app) that monitors respiratory functions and promotes adherence to taking asthma medications. CoheroHealth is preparing to launch a pilot of the app in January through Mount Sinai Hospital in New York City, and is aiming for full market launch later in 2014.

Founder of the New York-based startup, Melissa Manice is a postdoctoral fellow with Mount Sinai. She completed her doctoral degree in clinical research in pediatrics. “I could spend my lifetime studying the problem or I can get grant money from the state,” she said.

The game app, called AsthmaHero, uses a sensor on the inhaler to monitor the child taking the medication. The microphone on the child’s phone will be used to take an audio file of the child’s breath and then converts it into a spirometry reading. When the child uses the inhaler at the times scheduled and records each breath when asked, the character in the game gets stronger, and gets add-ons like records. As the children continue to take their medicine and record their breaths, the character progresses through different levels in the game, and the children are rewarded with tokens and gifts.

Researchers at the University of Washington are currently seeking FDA approval for the use of the microphone sensor on the phone to capture long function data. The data collected through the app will be transferred to the child’s doctor in real time through software that is currently being developed.

Currently asthmatic children are given a peak flow meter to measure their breaths, or spirometry data. Manice said children’s adherence to using the traditional device, and reporting the data to their doctors is very low.

But a push symmetric reading can indicate that an asthma attack is looming. Manice said a large number of emergency room visits for asthmatic children could be prevented if they would take their medicine as prescribed.

“It [the app] keeps kids out of the emergency room and saves a lot of costs for the health care system,” Manice said.

Manice has been running a testing pilot with 12- through 15-year-olds, “targeting non-population, but knowing that it will have the potential to be used by young adults,” she said. A pharmaceutical company has already expressed interest in using a similar app for cystic fibrosis patients, who also need to use an inhaler. Manice said.

AsthmaHero also sends children reminders through their smartphones when they have not taken their medication—“a push notification, a text, or an email.”

Manice said funding for the app aside from investors, would come from health insurers that are starting to reimburse for disease management mobile tools, and pharmaceutical companies that produce the asthma medications.

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**Quick $10,000 Grants for Sandy-Wrecked Businesses**

ASSOCIATED PRESS

NEW YORK—Small business owners in New York can get expedited grants from a state program aimed at helping them recover from three storms including Superstorm Sandy.

The state’s Small Business Storm Recovery program will give owners who apply for grants $10,000, while their claims are still being processed. That amount requires work required for a full grant of $50,000 or more. Business owners must still submit a full grant application within 60 days of receiving the $10,000.

“The expedited grants will officially announced Friday. Business owners who suffered damage from Sandy last year, Hurricane Irene and Tropical Storm Lee in 2011, are eligible for the grants.”

The state decided to fund $200 million in preliminary grants because many owners have found it difficult to rebuild and run their businesses and come up with all the documentation required for the full grants, said Beth Diamond, director of the Governor’s Office of Storm Recovery.

Diamond also said many small-business owners have been skeptical that they would get grant money from the state.

“To show them that this is real, we’ll get some funding out to them,” Diamond said.

Owners aren’t automatically getting the $10,000 when they apply. Diamond said. The applications will be reviewed to ensure that businesses have already had rebuilding costs and that they in fact need the grants.

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