Virtual Reality and App Improve Caregiver Education on Asthma Control

Brief Description of Technology
Virtual reality and smart phone app have been developed to improve caregiver education regarding asthma management.

Technology ID
2016-0806

Technology Overview
Researchers at Cincinnati Children’s have developed IMPACT-Asthma, a virtual reality curriculum of asthma educating avatars bundled with a smart phone app, to address chronic childhood asthma, which has substantial patient morbidity and extensive medical costs.

It was found that inadequate education greatly hindered caregiver management of the chronic disease. IMPACT-Asthma will reinforce in-person training, provide medication reminders and real-time identification of medication type. The education modalities will enhance caregiver understanding of asthma treatment, resulting in improved asthma symptom control as measured by higher Asthma Control Test (ACT) scores.

Applications
• Asthma education
• Smart phone app could be utilized for various educational needs and medication reminders

Advantages
• Enhanced caregiver education regarding proper asthma medications and asthma control
• Improved asthma symptom control & ACT scores

Market Overview
According to the CDC, an estimated 39.5M people, including 10.5M children in the US, have been diagnosed with asthma in their lifetime. The total estimated cost of asthma to society was $56B in 2007, and cost from lost productivity alone was $3.8B. Suboptimal asthma control can lead to lost productivity resulting in missed school days and missed work days.

Investigator Overview
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