Medical acoustics, UB reaching COPD patients with new Lung Flute

September 7 2011, By Charlotte Hsu

An easy-to-use device developed by a local biomedical company is providing relief to Buffalo-area patients suffering from chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema.

The Lung Flute, one of Popular Science magazine's best 100 innovations of 2009, is a hand-held device that employs sound-wave technology to break up mucus in the lungs. The device is distributed by Medical Acoustics, a Western New York firm that has partnered with the University at Buffalo for years on research and development.

Though Medical Acoustics is already distributing the Lung Flute to hospitals in the U.S., Asia and Europe, Buffalo Niagara is the company's pilot market for distribution of the product through durable medical equipment (DME) providers that fill prescriptions from doctors for individual patients.

Local DME providers such as such as Benson's Surgical, Buffalo Pharmacies, Complete Homecare, Pro2, and Sheridan Surgical are now carrying the Lung Flute, in addition to organizations such as Hospice Buffalo, said Sharon Raymond, a business development consultant for Medical Acoustics. The firm will use case studies of local DME sales to inform its strategy for distributing the product across the country.

"It's successful because it's relieving congestion in people's lungs," said Raymond, who has been demonstrating the device to physicians in the
area. "For folks with COPD, it's not just a regular cough, it can be congestion on a daily basis. Imagine starting your day with congestion and wanting to clear it up, every day. The Lung Flute has been designed to provide that relief."

As Medical Acoustics has worked to commercialize the Lung Flute, the company has leveraged the expertise of UB staff and faculty working in different areas of the university.

The UB Office of Science, Technology Transfer and Economic Outreach (STOR) helped the firm identify its key market and draft its first business plan. The UB Center for Advanced Biomedical and Bioengineering Technology (UB CAT) -- funded by the New York State Foundation for Science, Technology and Innovation (NYSTAR) -- has supported the company with about $100,000 to help commercialize the Lung Flute.

Sanjay Sethi, MD, UB professor of medicine, has led a series of clinical trials demonstrating the safety and efficacy of the Lung Flute. These studies played a critical role in the U.S. Food and Drug Administration's decision to clear the Lung Flute for both diagnostic and therapeutic uses.

Sethi, chief of UB's Division of Pulmonary, Critical Care and Sleep Medicine, is now conducting another trial to examine the Lung Flute's performance over a six-month period.

Medical Acoustics' partnership with UB exemplifies how collaborations between industry and academia are contributing to the growth of Western New York's biomedical economy.

The company, located in the Innovation Center on the Buffalo Niagara Medical Campus, has about 10 employees, most of whom are full-time.
Manufacturing is also local, with Polymer Conversions in Orchard Park producing the Lung Flute.

Provided by University at Buffalo

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