

## For More Information

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## FOR IMMEDIATE RELEASE

### **CLEVEMED COMPLETES THE FIRST EVER VIRTUALLY ATTENDED HOME SLEEP STUDY USING MOBILE PHONE BROADBAND INTERNET SERVICE NETWORKS**

**CLEVELAND, OHIO, April 4, 2007** – Cleveland Medical Devices Inc. (CleveMed) announced today that it recently conducted the first virtually attended sleep study using *mobile phone* broadband internet service from a subject's home. The study was performed using CleveMed's proprietary wireless technology and medical communication system to provide real-time transmission of polysomnography (PSG) data. This new technology combined with CleveMed's established wireless PSG systems can now allow a technologist to perform virtually attended sleep studies from almost anywhere in the world.

The Crystal Monitor<sup>®</sup> 20-B is a wireless 14 channel PSG system for diagnosing sleep-disordered breathing. Unlike sleep screeners that only collect a limited number of physiological signals, the Crystal Monitor 20-B is a complete PSG system that collects all of the relevant data needed for proper sleep diagnosis including EEG, ECG, EMG, EOG, airflow, snore, thoracic and abdominal respiratory efforts, body position and pulse oximetry. Because a large number of homes in the United States and around the world still are without high speed internet access, CleveMed's system utilizing the mobile phone broadband network allows for virtually attended studies to be performed in almost any setting, regardless of the patient's personal access to the internet.

During the virtually attended study, a sleep technologist monitored the PSG signals and video in real-time from several miles away. Because the data is monitored in real-time, the sleep technician was able to view the data in a supervised manner that is comparable to a study done in the sleep lab where the sleep technologist monitors the patient in the next room.

According to Frost and Sullivan, over 10 million patients suffer from Obstructive Sleep Apnea in the US alone, most of whom remain undiagnosed due to overcrowded sleep centers and low disease awareness among the population. Until now, sleep evaluation has been mostly conducted either in the sleep lab or via a less costly and less comprehensive unattended sleep screening study. "Our technology offers the best of both worlds. The diagnostic power of in-lab evaluation, combined with the convenience

and cost effectiveness offered by the home environment, would benefit millions of patients who suffer from sleep disordered breathing, their doctors and the insurance companies," says Hani Kayyali, CleveMed President. "Potential applications include pediatric studies, pharmaceutical research for drug development, and studies for patients who are unable to go to sleep labs."

According to nationally recognized ADHD and pediatric sleep specialist, Dr. Barbara Fisher of Great Lakes Sleep Diagnostics LLC, "When patients are in their own bed, extraneous variables that accompany in-lab sleep studies are limited. Children, particularly infants, would clearly benefit from a home study given their issues of attachment and the comfort level they feel in their own home."

Dr. Felicitas Juguilon, Chief Medical Officer of the AntiAging and Vitality Center, Inc. in Cleveland, Ohio corroborated the advantages to having full, virtually attended PSG studies done from the patient's home. "I have so many fibromyalgia patients who could benefit from such a technology. Due to their constant pain these patients resist going to sleep labs. Overnight PSG studies in their own homes offer a very attractive alternative."

**About CleveMed** – CleveMed was founded with the goal of developing innovative telemetry devices for a variety of medical applications. Today, CleveMed is developing and pioneering the use of novel wireless monitoring systems for high growth neurology and rehabilitation applications, including brain monitoring, sleep disorders and movement disorders. Through these innovations, CleveMed has developed a growing range of products that address the needs of the medical, research and academic communities.

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