CARDIONET
Remote Patient Monitoring Stops Healthcare from Hemorrhaging Money

If ever a sector of the economy needed device-driven intelligence, it is healthcare. Patients and doctors are looking for ways to improve care and maintain quality of life. This means a search for better diagnoses and less intrusive care. M2M technologies are helping to accomplish these goals by enabling medical work to occur outside of the hospital, allowing doctors to observe patients in their daily lives and reduce the need for hospital stays and doctor visits.

CardioNet is one of the pioneers of remote patient monitoring services and mobile cardiac outpatient telemetry (MCOT). The company focuses on the diagnosis, monitoring and treatment of cardiovascular diseases associated with cardiac arrhythmia. Cardiac arrhythmias are irregularities in the heartbeat that can cause cardiac arrest, heart attacks, and put patients at greater risk for life-threatening events such as stroke. CardioNet's solution enables doctors to wirelessly monitor patients’ heartbeats as they go about their daily lives, yielding more accurate diagnoses and better treatments.

A Patient wears three leads that are connected to a small sensor on the chest. The sensor wirelessly transmits ECG data to a portable monitor that is about the size of a cell phone. This monitor then tracks the patient’s heartbeat, records abnormalities and sends data to CardioNet’s centralized monitoring center over Sprint’s CDMA2000® network. At the monitoring center, trained technicians collect and analyze the data before returning it to the patient’s doctor for further diagnosis and analysis.

The market for wireless cardiac monitoring services is more than $1.2 billion. This is driven by the fact that over four million Americans are affected which in turn causes over 780,000 hospitalizations annually. The national average charge per hospital admission for cardiac arrhythmias is $26,500 (versus an average prescription rate for CardioNet of $1,300). Industry surveys of cardiologists provide clear evidence of a growing recognition of the value of MCOT within the physician community. The most important conclusion from industry analysis is that MCOT is nearly three times more effective in diagnosing clinically significant arrhythmias when compared with the prevailing industry methods.

These statistics are born-out by the financial performance of CardioNet which has now achieved ten consecutive quarters of record patient volume and revenue (patient volume increased to 113,000 in 2009, a 50% increase over 2008 and revenue in 2009 increased to $141 million, a 17% increase over 2008).

The growth outlook for wireless cardiac monitoring remains strong and the success of CardioNet’s solution has driven a host of other remote patient monitoring solution providers into the market making mobile healthcare a leading market for M2M applications. As physicians and patients continue to seek more cost-effective, highly personalized, and less intrusive medical solutions, mHealth and wireless patient monitoring will continue to grow in popularity.