Text Messaging Medication Reminders Significantly Reduces Organ Rejection in Pediatric Liver Transplant Recipients

Mt. Sinai Medical Center's Pediatric Gastroenterology Department published results from a promising yearlong study conducted with pediatric liver transplant patients using CareSpeak Communications' MediM AS medication reminder system to keep them taking critical medication on schedule. By sending text message reminders to 41 pediatric patients and/or their parents, only 2 patients experienced a rejection episode versus 12 patients prior to the use of the MediM AS system.

New York, NY (PRWEB) June 4, 2009 -- Mt. Sinai Medical Center's Pediatric Gastroenterology Department, under the leadership of Dr. Tamir Miloh, published results from a promising yearlong study conducted with pediatric liver transplant patients using CareSpeak Communications' MediM AS medication reminder system to keep them taking critical medication on schedule.

Successful treatment of patients after Orthotopic Liver Transplantation (OLT) requires regular intake of medication and non-adherence with medication has been reported in up to 40% of adolescent OLT recipients. Non-adherence can include not taking the medication at the prescribed frequency, dose or time and can be deliberate or unintentional. Non-adherence has been associated with severe morbidity: acute/chronic rejection, end stage liver disease, hospitalizations, rising costs, re-transplantation and even death. The most common reported reason for non-adherence in OLT recipients is forgetfulness.

Improving compliance with medication is essential to improving long-term outcomes in pediatric transplant recipients. Current methods of improving adherence for chronic health problems are mostly complex and not very effective. The aims of the study were to pilot test the effects of text messaging medication reminders on patient's adherence and outcome.

"This new technology may prove effective in the transition of responsibility from caregiver to child. These results should be of interest to health-care professionals and policy makers, as it may reduce the morbidity, mortality and the utilization of financial and human resources associated with liver transplantation. Text messaging is a behavioral support intervention that can be incorporated into routine clinic care, personalized and adapted to suit other chronic disease and age groups." said Dr. Miloh.

The study included 41 patients between the ages of 1 and 27 years old (median age 15) who were taking anywhere from 1 to 3 specific medications to suppress the immune system daily. The medication was either self-administered or by the parent/caregiver.

Patients or their parents/caregivers received a text message when it was time for the patient to take their medication. In the case of older patients that possessed their own cell phone, the text messages were sent to the patient directly. If the patient didn't confirm via a return text message medication intake within a pre-determined amount of time (e.g. 30 minutes), a follow up message was sent to the parent/caregiver alerting them that patient potentially didn't take medication. The caregiver message included the patients' cell phone number allowing for immediate dialing.

After the 12-month period of the study, compared to the previous 12-month period prior to the study, this group
of patients showed significant improvement in medication adherence (evident in stable, on target blood levels of the medication). This resulted in significantly lower number of organ rejection episodes in this group; 12 cases in the year before the study and only 2 during the study year. Organ rejection usually requires immediate hospitalization and treatment lasting on average anywhere from 6 to 10 days, or in extreme cases a re-transplant. In addition to the significantly negative impact on the patients overall health, it poses a significant cost to the hospital and health insurance provider.

"According to a report published by the Taskforce for Noncompliance in 1994, the direct and indirect impact of medication non-compliance is over 100 billion dollar per year in the US alone. With the aging population trend and earlier onset of illnesses such as Diabetes, this number is only going to get bigger. At CareSpeak, we believe that a simple and reliable technology such as the MediM AS system can have a huge public health and economic impact.", said Serge Loncar, founding President and CEO of CareSpeak Communications.

Loncar says that the CareSpeak platform is very flexible and scalable. The company plans to launch the DiabeText Juvenile Diabetes application in the coming weeks, and an application for monitoring large mental health patient populations in the 2nd half of the year.

For additional information please contact:
Serge Loncar, CareSpeak Communications, Telephone: +1 (732) 763-9436, Fax +1 (732) 432-9476, web: http://www.carespeak.com

CareSpeak Communications provides mobile communications technology solutions to health care professionals, patients, and caregivers for better medication compliance resulting in more successful treatment outcome for the patient, increased profit and cost savings for insurers and employers respectively, and increased revenues for pharmaceutical companies, retail pharmacies & PBMs. CareSpeak Communications is a New Jersey based, privately held company.

###
Contact Information
Serge Loncar
CareSpeak Communications
http://www.carespeak.com
732-763-9436

Online Web 2.0 Version
You can read the online version of this press release here.