

Lucile Packard Children's Hospital and Monterey Medical Solutions Team Up To Improve Patient Safety

Use of TPN MedSoft™ Software Contributes to a 70% Reduction in Medication Errors

PALO ALTO, Calif. – Oct. 13, 2004 – Lucile Packard Children's Hospital (LPCH) at Stanford, a national leader in patient and child safety, highlighted a variety of medication safety initiatives during its recent accreditation survey with JCAHO, the Joint Commission on Accreditation of Healthcare Organizations. A centerpiece of the presentation was TPN MedSoft™ software used at LPCH, developed by founders of Monterey Medical Solutions, a leader in clinical software solutions designed to improve patient care.

LPCH has been using TPN MedSoft software for more than 20 years and has one of the best Total Parenteral Nutrition (TPN) administration patient safety records in the country. Now, Monterey Medical Solutions has commercialized the TPN MedSoft software to make it available to children's hospitals nationwide.

Total Parenteral Nutrition therapy supplies life sustaining nutrients intravenously to premature or low-birth weight babies, infants, and children who are unable to breast-feed or take feeds orally. TPN solutions provide essential proteins, carbohydrates, fats, vitamins, minerals, trace elements, and fluids. It can also be administered to adult patients who cannot take food orally.

“TPN is recognized throughout the children's hospital community as an essential life support therapy with a significant opportunity to cause serious harm if not administered correctly,” said Paul Sharek, MD, MPH, chief clinical patient safety officer at LPCH. “It is this potential for error coupled with manual pharmacy processes that are driving all children's hospitals to look for automation and quality control solutions, such as those offered by TPN MedSoft.”

According to Dr. Sharek, recent accelerated efforts in patient safety and medication error prevention included upgrades to TPN MedSoft and have resulted in improved safety outcomes at LPCH. These contributed to a 70 percent decrease in Adverse Drug Event (ADE) rates and a decline in the number of pharmacy interventions related to TPN therapy.

“The team at Lucile Packard Children's Hospital continues to demonstrate significant leadership in the use of technology to maintain the highest standards of patient safety,” said Mark Yelderman, MD, CEO of Monterey Medical Solutions. “We are proud of our 20-year development of this vital software that has proven ability to dramatically improve the safety and effectiveness of TPN therapy.”

Every year, approximately 1 million injuries and up to 100,000 deaths may be attributed to medical errors, according to the National Academy of Sciences' Institute of Medicine (IOM). Medical

errors are the eighth leading cause of death in the United States, higher than auto accidents, breast cancer or HIV/AIDS related deaths.

More than 7,000 people die each year from medication errors alone. The IOM estimates that half of Adverse Drug Events (ADEs) to medicines are the result of medical errors. The rate for potential medication errors and ADEs is three times higher in children than adults and significantly higher for babies in the neonatal intensive care unit (NICU).

The TPN ordering, formulation calculating, and compounding process is one of the most complex, error prone, and labor intensive responsibilities of an inpatient children's hospital pharmacy. TPN MedSoft automates the processing of physician prescriptions for TPN and generates labels and mixing instructions for manual compounding by the pharmacist or for automated compounding.

The system optimizes TPN therapy through the use a patient-centric model based on nutritional requirements and patient physiology. An interactive order process provides physicians with instant feedback and dosing guidance for each nutritional ingredient. In addition, the software enforces standards-based nutritional protocols and notifies physicians of any variance. The nutritional guidelines that serve as the foundation for TPN MedSoft are based on the gold standard Parenteral Nutrition textbook and chapters developed by John A. Kerner, Jr., MD, professor of pediatrics at Stanford University School of Medicine. Additionally, Dr Kerner regularly monitors the scientific literature and conferences for updates and advances in parenteral nutrition that need to be incorporated in the software.

“Over the past several years, there have been numerous reports of infants and children dying as a result of TPN related errors around the country. The real tragedy is that these deaths may have been averted with automated processes and adherence to standard protocols,” said Robert Poole, Pharm.D, director of pharmacy, LPCH. “Although a number of medical and pharmacy societies advocate for the need to follow rigid protocols and automated processes, a recent survey demonstrated that the majority of U.S hospitals failed to comply with published guidelines.

“I am excited to see that Monterey Medical Solutions is now making the software available for use in all children hospitals to improve patient care and safety. It is with software tools like TPN MedSoft that we can make TPN therapy truly safe for the first time,” added Dr. Poole.

About Monterey Medical Solutions, Inc.

Monterey Medical Solutions, Inc. was founded in 2004 to provide a commercial platform for the TPN MedSoft system, a clinically proven process for management of Total Parenteral Nutrition (TPN). TPN Medsoft sets the standard of excellence for performance and patient safety in the TPN order management process. A fully implemented TPN Medsoft software system fulfills all the Safe Practices for Parenteral Nutrition Formulations standards developed by the National Advisory Group on Standards and Practice Guidelines for Parenteral Nutrition, approved by A.S.P.E.N. It also complies with the guidelines of the American Academy of Pediatrics. For more information, contact Monterey Medical Solutions at 800/651-8836 or info@montereymedicalsolutions.com

About Lucile Packard Children's Hospital

Lucile Packard Children's Hospital at Stanford is a 264-bed hospital devoted to the care of children and expectant mothers. Providing pediatric and obstetric medical and surgical services and associated with Stanford School of Medicine, LPCH offers patients locally, regionally and nationally the full range of health care programs and services - from preventive and routine care to the diagnosis and treatment of serious illness and injury. To learn more about Lucile Packard Children's Hospital, please visit our Web site at <http://www.lpch.org>.

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