

Home Parenteral Nutrition (HPN) Safety and Quality Assurance Project

Magdalena Pietka, Witold Brniak, Agata Rozkocha
Stanley Dudrick's Memorial Hospital, Skawina, Poland
Address for correspondence
Magdalena Pietka
Stanley Dudrick's Memorial Hospital
Tyniecka 15
32-050 Skawina
Poland
magpietka@gmail.com

In 2011 the **Home Parenteral Nutrition (HPN) Safety and Quality Assurance Project** was started at the Stanley Dudrick's Memorial Hospital in Skawina, Poland. Its major goal was to improve the quality and safety of the therapy by introducing the Nutrition Support Teams (NST) to the care of HPN patients.

Home-based preparation of parenteral nutrition is a high-risk process and the multiple steps in the procedure provide many opportunities for human error and therapy complications. Therefore the only proper way is to prepare the admixtures in the hospital pharmacy by the skilled pharmacists following all GMP guidelines and to deliver them to patients at home. Our hospital takes nutritional care of about 100 patients from wide area of Poland, so the high efficient logistics and cold chain distribution process is an extension of the good manufacturing practice (GMP) environment. The assurance of the parenteral admixtures stability and compatibility is the extremely important task especially in home PN, since they are delivered to the patient usually once a week. Therefore, the NST performed the evaluation and standardization of PN admixtures. It reduced the cost of stability analysis, lowered the risk of pharmaceutical instability, but still allowing meeting the patients nutritional needs. In order to improve the safety and to speed up the ordering process, we designed the online system with TPN calculator – more convenient than the standard paper-based prescribing system.

The HPN safety and quality assurance project is still developing through the improvement of standard operating procedures, reducing medication errors by implementing evidence-based practices and new technologies, upgrading TPN calculator and online ordering system, providing the right advice on the safe use of PN, and educating NST members, patients and their families. The current objective is to spread the Good HPN Practices to the other hospitals in Poland.