Reducing Hospital Readmission Rates with Data Analytics

Kathryn H. Bowles, PhD, RN, FAAN

Dr. Kathryn H. Bowles, Professor of Nursing and vanAmeringen Chair in Nursing Excellence, developed a methodology with her colleagues at the University of Pennsylvania School of Nursing to learn about discharge rates of older adults in hospitals. The Discharge Decision Support System (D2S2) improves clinical care as part of the NIH Small Business Innovation Research (SBIR) program.

Dr. Bowles co-founded a company to scale-up the technology, developing D2S2 into software that analyzes data to identify high-risk patients in need of post-acute care, ultimately reducing the readmission rate. The D2S2 was embedded in three hospitals and helped bring about a 35 percent reduction in 30-day readmissions and a 26 percent reduction in 60-day readmissions.