



# Partnering to Reduce Blood Stream Infections in Inpatient Dialysis Patients

## Central Line-Associated Blood Stream Infection (CLABSI) Overview

Central venous catheters (CVCs) are lifesaving devices—and are linked to approximately 250,000 central line-associated blood stream infection (CLABSI) cases annually in hospitals across the United States.<sup>1</sup> Dialysis catheters are a common cause of CLABSI. Fortunately, CLABSI is preventable through a proactive approach that involves identifying and addressing the unique risk factors for CLABSI in each hospital setting.

## Yale New Haven Hospital's CLABSI Challenge

With a commitment to patient safety and zero events of harm, Yale New Haven Hospital (the fourth largest hospital in the United States) prioritizes CLABSI reduction. As of May 2016, the hospital had experienced 14 CLABSI cases related to hemodialysis CVCs over the previous 18 months. These cases had the potential to lengthen hospital stays, heighten mortality risk and increase costs by approximately \$785,000.

Yale New Haven Hospital partnered with DaVita, a national Joint Commission-accredited provider of inpatient renal care, to address the CLABSI concern. DaVita was eager to support the hospital in its efforts. DaVita's hospital services administrator collaborated with Yale New Haven Hospital's nursing specialties director to identify the root causes of the CLABSI cases, develop a plan of action and organize biweekly safety huddles to review progress.

## CLABSI Stats<sup>1</sup>

- CLABSI is the most common cause of health care-associated blood stream infection
- Approximately 250K CLABSIs occur annually in U.S. hospitals
- Blood stream infections cause up to 62K deaths of patients in hospitals annually
- Up to 25% of patients with CLABSI die
- A single CLABSI incident can cost a hospital as much as \$56K



Hospital Services

## The Cause of CLABSI

DaVita's clinical and administrative teams, in partnership with the Yale New Haven Hospital team, collected source data and analyzed the results to identify the top risk factors contributing to dialysis-related CLABSI. Seven factors were identified. Primary opportunities for improvement were related to CVC maintenance, including dressing changes, competency staff training and reinforced best practices.

## Plan of Action

DaVita's administrator and the hospital team designed and implemented a plan of action with the following core components:

- **Education:** DaVita partnered with Yale New Haven Hospital to provide ongoing education and training for the hospital's clinical team. Leaders from both organizations worked to ensure every team member was knowledgeable and competent in dialysis catheter best practices.
- **Communication:** The acute clinical coordinator served as a communications liaison between the DaVita administrator and the acute nurses to help ensure CLABSI risks and incidences were reported and addressed immediately. The acute nurses reported any of the seven risk factors as soon as they were identified.

Within this framework, DaVita tracked the dialysis-related CLABSI status and, in partnership with Yale New Haven Hospital, drove significant improvement.

## Results

The CLABSI plan of action was implemented in May 2016. With a strong, consistent focus on patient safety and a proactive approach to addressing potential CLABSI cases, Yale New Haven Hospital and DaVita successfully prevented additional CLABSI cases following the implementation—As of September 2017, **the hospital has seen no new cases of dialysis-related CLABSI.**

DaVita is currently rolling out individually tailored, intensive CLABSI protocols across all hospital partners in an effort to provide the same level of care to all patients.

Reduction of CLABSIs at Yale New Haven Hospital over 18 Months



“Working in collaboration with DaVita on the CLABSI issue, we developed an action plan that led to an immediate and continued reduction in dialysis-related CLABSIs.”

—Jennifer Ghidini, MSN, APRN, CNML  
Nursing Director Medical Critical Care Service & Nursing Specialties, Yale New Haven Hospital

For more information on how DaVita can partner with you to address CLABSI or other dialysis-related challenges, contact [hospitals@davita.com](mailto:hospitals@davita.com).

1. Preventing bloodstream infections from central line venous catheters. World Health Organization, 2017.

### About DaVita Inc.

DaVita is a Fortune 500® health care provider focused on transforming care delivery to improve quality of life for patients around the globe. The company is the largest provider of kidney care services in the U.S. and has been a leader in clinical quality and innovation for 20 years. Through DaVita Kidney Care, the company treats patients with chronic kidney failure and end stage renal disease. DaVita is committed to bold, patient-centric care models, implementing the latest technologies and moving toward integrated care offerings for all. As of March 31, 2019, DaVita serves 203,000 patients at 2,664 outpatient dialysis centers in the United States. The company also operates 241 outpatient dialysis centers in nine countries across the world. DaVita has reduced hospitalizations, improved mortality, and worked collaboratively to propel the kidney care industry to adopt an equitable and high-quality standard of care for all patients, everywhere. To learn more about how DaVita is leading the health care evolution, please visit [DaVita.com/About](http://DaVita.com/About).

