In August 2025, Joint Commission's Chief Nursing Executive Ken Grubbs (fourth from the left) joined the DaVita team during their triennial survey to learn more about their work to maintain the highest standards of care.

Spotlight on Success

Standardized Order Sets Improve Hemodialysis Safety at DaVita Hospital Services

A hemodialysis order set is a predefined, standardized template used by healthcare providers to quickly and efficiently order all necessary care, medications, laboratory tests, and procedures for a patient undergoing hemodialysis. An incomplete order set presents a variety of patient safety risks. If the order set is missing important information, the patient may get the wrong treatment, leading to harm or other negative outcomes. Incomplete order sets may also result in clinicians unintentionally practicing outside their scope or in delays in care. Nurses at the bedside must follow up with the ordering physician to get the missing information before treatment can begin. In some urgent dialysis situations, delayed care can be devastating for patients.

This article details DaVita Hospital Services' efforts to ensure complete and accurate hemodialysis order sets and how the organization worked with its hospital partners to implement sustainable change.

About the Organization

In 2013 DaVita Hospital Services became the first Joint Commission–accredited provider of inpatient kidney care and apheresis therapies. The organization provides approximately 1.3 million procedures each year to more than 750 hospital partners in the United States and beyond. Its services include hemodialysis, peritoneal dialysis, continuous kidney replacement therapies, and apheresis services.

Identifying the Root Cause

DaVita Hospital Services has always used its Joint Commission surveys to improve safety by conducting a root cause analysis for findings and developing a plan for correction, according to the established standards compliance process. During its reaccreditation survey in December 2022, DaVita broadened its approach. Rather than considering the current findings as stand-alone problems to fix, the organization looked back at findings from previous surveys to understand patterns and identify ongoing contributing factors. According to Samantha Guess, national director of clinical services for DaVita's Hospital Services Group, that analysis showed that the bulk of the organization's findings were related to incomplete hemodialysis order sets.

DaVita uses a standard order set based on recommendations from the American Nephrology Nurses Association's (ANNA) *Core Curriculum of Nephrology Nursing.* According to ANNA, a complete hemodialysis order set must include at least the following:

- Date treatment is to be performed
- Dialyzer make and model
- Dialysate composition, which includes the following:
  - Potassium
  - Calcium
  - Sodium dialysate
  - Bicarbonate
- Blood flow rate or blood flow range orders
- Dialysate flow rate
- Duration of treatment
- Anticoagulation
- Ultrafiltration or ultrafiltration range orders
- Dialysate temperature
- Hypotension management
- Additional orders for labs, medications, blood products, as applicable

DaVita's Joint Commission survey findings did not indicate that the order set itself was the problem. Rather, many of the findings could be traced back to order sets in the electronic medical record (EMR) system lacking critical information from the ordering nephrologists.

"It took a lot of digging below the surface," Guess explains. "We had to look at several different standards and connect the dots. But in the end, it was clear that the common factor in many of our findings was an incomplete order set."

After the root cause was revealed, DaVita quickly realized that having a standardized order set for all its hospital partners would be an effective solution. The organization assembled a team to address the problem, including the director of clinical services, regional operations directors, hospital services clinical

DaVita Hospital Services was the first provider of inpatient acute dialysis and apheresis therapies to earn Joint Commission accreditation. Today, nearly 500 of its in-hospital dialysis programs are accredited, reflecting a relentless drive for excellence. Pictured: Alexandra Abbott, hospital services clinical manager; Theodosia Jones and Dexter Cubero, acute dialysis registered nurses; and Group Hospital Services Administrator Rachael Kight. Photo credit: Garrett Lofland.

managers, hospital services administrators, and hospital partners and nephrologists. With the support of VP of Clinical Services Theresa Stright and Chief Medical Officer Dr. David Mahoney, DaVita teammates worked with hospital partners to ensure that all order sets contained required information.

Standardization across multiple hospitals was necessary because although DaVita's policy required certain elements in its order set, its hospital partners' EMR systems were inconsistently populating all components of a complete hemodialysis order set. For example, some systems did not allow ordering physicians to provide ranges for certain components of the order. DaVita's hundreds of hospital partners have great variability in their EMR vendors and systems; even the same EMR product can vary among different facilities in a single hospital system. This variation caused significant differences in the hospitals' ability to capture all necessary order set elements required by DaVita. In fact, an audit of 794 hospitals' order sets revealed that only 40% met DaVita's policy.

The DaVita team developed a plan to help its hospital partners adjust their EMRs to produce hemodialysis order sets that align with DaVita's policies. The central component of the plan was creating a Complete Hemodialysis Order Set EMR Playbook. The playbook includes the following resources for use by DaVita's local leaders:

- Talking points to guide conversations with hospital leadership and facilitate meaningful EMR changes at each site.
- List of relevant Joint Commission standards (*see* sidebar on page 5) and how they relate to complete hemodialysis order sets. These can be used for additional leverage to prioritize hospital EMR amendments.

RELATED JOINT COMMISSION STANDARDS

DaVita Hospital Services' Complete Hemodialysis Order Set EMR Playbook includes the following Joint Commission accreditation standards for hospitals and critical access hospitals to underscore the importance of complete order sets to patient safety:

MM.14.01.01, EP 3 The [hospital] develops and implements a written policy that defines the following:

- Specific types of medication orders that it deems acceptable for use
- Minimum required elements of a complete medication order, which must include medication name, medication dose, medication route, and medication frequency
- When indication for use is required on a medication order
- Precautions for ordering medications with look-alike or sound-alike names
- Actions to take when medication orders are incomplete, illegible, or unclear
- Required elements for medication titration orders, including the medication name, medication route, initial rate of infusion (dose/unit of time), incremental units to which the rate or dose can be increased or decreased, how often the rate or dose can be changed, the maximum rate or dose of infusion, and the objective clinical measure to be used to guide changes

PC.12.01.01 The hospital provides care, treatment, and services as ordered or prescribed and in accordance with law and regulation.

RC.12.01.01, EP 2 The medical record contains the following clinical information:

- Admitting diagnosis
- Any emergency care, treatment, and services provided to the patient before their arrival
- Any allergies to food and medications
- Any findings of assessments and reassessments
- Results of all consultative evaluations of the patient and findings by clinical and other staff involved in the care of the patient
- Treatment goals, plan of care, and revisions to the plan of care
- Documentation of complications, health care–acquired infections, and adverse reactions to drugs and anesthesia
- All practitioners' orders - Nursing notes, reports of treatment, laboratory reports, vital signs, and other information necessary to monitor the patient's condition
- Medication records, including the strength, dose, route, date and time of administration, access site for medication, administration devices used, and rate of administration

  Note: *When rapid titration of a medication is necessary, the hospital defines in policy the urgent/emergent situations in which block charting would be an acceptable form of documentation. For the definition and a further explanation of block charting, refer to the Glossary.*

- Administration of each self-administered medication, as reported by the patient (or the patient's caregiver or support person where appropriate)
- Records of radiology and nuclear medicine services, including signed interpretation reports

- All care, treatment, and services provided to the patient
- Patient's response to care, treatment, and services
- Medical history and physical examination, including any conclusions or impressions drawn from the information
- Discharge plan and discharge planning evaluation
- Discharge summary with outcome of hospitalization, disposition of case, and provisions for follow-up care, including any medications dispensed or prescribed on discharge
- Any diagnoses or conditions established during the patient's course of care, treatment, and services

LD.12.01.01, EP 2 As part of performance improvement, leaders (including the governing body) do the following:

- Set priorities for performance improvement activities related to health outcomes that are shown to be predictive of desired patient outcomes, patient safety, and quality of care
- Give priority to high-volume, high-risk, or problem-prone processes for performance improvement activities and consider the incidence, prevalence, and severity of problems in those areas
- Identify the frequency and detail of data collection for performance improvement activities

These standards are effective as of January 1, 2026. See your applicable *Comprehensive Accreditation Manual* or its E-dition® counterpart for related Notes and Centers for Medicare & Medicaid Conditions of Participation.

EP, element of performance; LD, Leadership; MM, Medication Management; PC, Provision of Care, Treatment, and Services; RC, Record of Care, Treatment, and Services.

- A formal EMR Amendment Request form that indicates all elements of a complete hemodialysis order and allows the organization to identify the specific pieces that are missing from a hospital's own EMR system.
- DaVita's Governing Body documentation requirements to acknowledge need for changes, progress updates, and a final confirmation once all changes are made.
- Complete hemodialysis order set "badge buddy" for clinicians to use when reviewing order sets prior to delivery of hemodialysis. The badge buddy is a laminated badge that lists all the requirements of a complete hemodialysis order set per DaVita policy. This easy-access reference tool is a quick double-check to ensure that all pieces of the hemodialysis order are documented in the EMR.

Overcoming Challenges and Measuring Success

This large-scale initiative presented some challenges for the DaVita team. For one, it was a huge undertaking to assess the EMR systems of each of the organization's 750+ hospital partners. DaVita's team of hospital services clinical managers worked with hospital services administrators to collect site-specific data and identify what needed to be changed in each EMR. Such changes can be expensive, and some hospitals did not have funding available to make them.

"Financial limitations are understandable," Guess explains. "With our partners' valuable collaboration, we developed protocols to ensure complete, comprehensive hemodialysis order sets were available in their systems."

> We really had to make our case. That's where the playbook helped. It armed our team with the information needed to show why our changes were important and how they would improve safety and quality.

—Samantha Guess, National Director of Clinical Services for DaVita's Hospital Services Group

Another challenge was competing priorities. At some hospitals, the EMR changes DaVita requested were competing with other requested changes for available resources.

"We really had to make our case," says Guess. "That's where the playbook helped. It armed our team with the information needed to show why our changes were important and how they would improve safety and quality."

Over the course of seven months, hospital service administrators and regional operations directors met with hospital partners to request EMR changes, press for prioritization, and continue to make progress.

"It was a tremendous amount of effort," Guess says.

That effort paid off. By July 2024, 90% of DaVita's hospital partners had complete hemodialysis order sets that aligned with the organization's policy. This represented a 60% increase in adherence. In addition, DaVita's 2025 triennial accreditation survey revealed zero findings related to incomplete hemodialysis order sets.

Verifying that all components of a hemodialysis order are entered into the patient's EMR is vital to ensuring patients receive safe care and that acute dialysis nurses are practicing within their scope.

Guess credits DaVita's success to its big-picture approach to analyzing accreditation survey findings. She says, "If you only look at the results of one survey, you could be hindering your ability to see a larger problem."

DaVita Hospital Services plans to continue advocating for complete hemodialysis order sets within its growing portfolio of hospital partnerships. TS