

Inpatient Dialysis Provider Type and Duration of Hospital Admissions of Dialysis Patients

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Disclosures

- JM, DL, GM, JG are employees of DaVita, Inc.

Background

- Inpatient dialysis treatments may be performed by hospital staff or by a contracted dialysis provider
- In this study, we compared duration of hospitalizations of dialysis patients who were admitted to hospitals performing in-house dialysis to that of patients who were admitted to hospitals contracting with a dialysis provider

Methods

- Data for this analysis were derived from the electronic medical records of a large dialysis organization.
- We identified patients who were hospitalized between Jan 2017 and Sept 2019.
- Length of stay was compared for patients who were admitted to hospitals performing dialysis in-house versus patients who were admitted to hospitals that contracted with the dialysis organization.

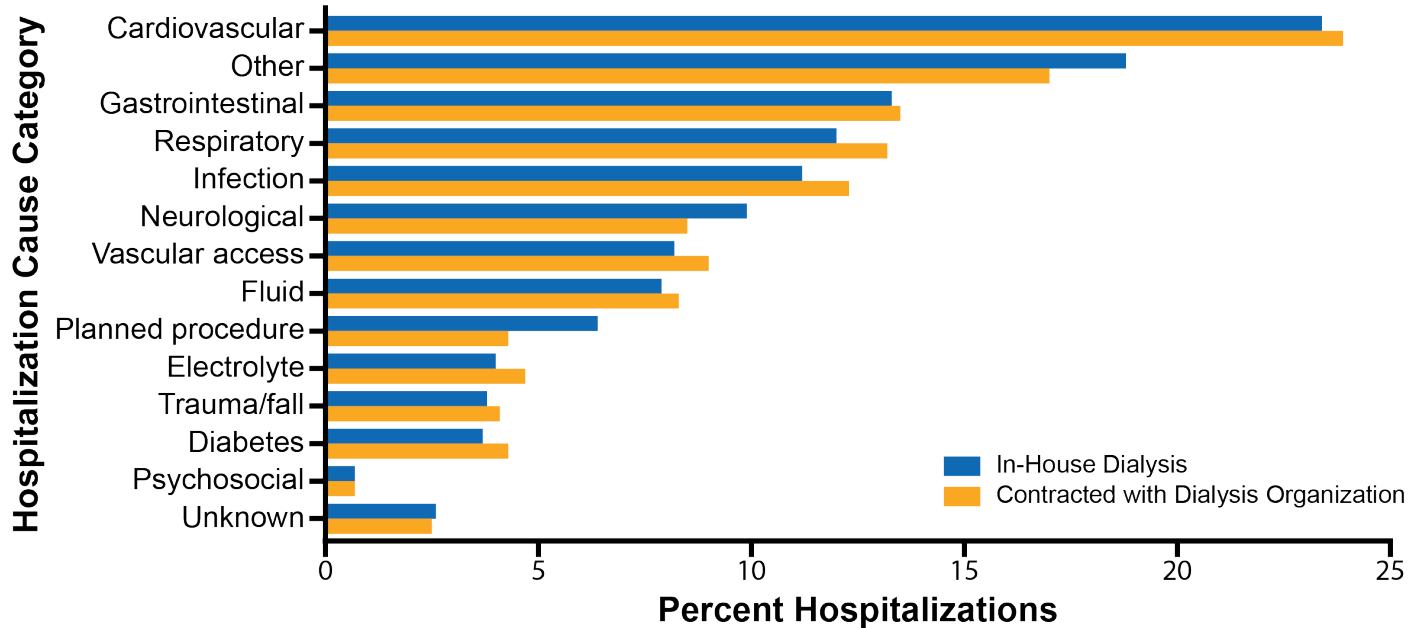
Patient Characteristics

	In-House Dialysis	Contracted with Dialysis Organization	Standardized Difference ^a
Unique patients	62,358	85,079	NA
Unique hospitals	510	699	NA
Total admissions	148,350	217,352	NA
Age, years, mean ± SD	61.7 ± 14.8	62.9 ± 14.7	7.6%
Dialysis vintage, months, mean ± SD	4.3 ± 4.3	4.1 ± 4.1	4.5%
Female sex, n (%)	69,473 (46.8)	103,561 (47.6)	1.7%
Race, n (%)			15.7%
White	51,247 (34.5)	87,731 (40.4)	
Black	58,158 (39.2)	70,668 (32.5)	
Asian	3966 (2.7)	6921 (3.2)	
Hispanic	25,847 (17.4)	37,659 (17.3)	
Other/unknown/missing	9132 (8.9)	14,373 (6.6)	
Diabetes, n (%)	109,864 (74.1)	163,381 (75.2)	2.7%
Hypertension, n (%)	70,790 (47.7)	98,998 (45.5)	4.4%

^a Standardized difference values exceeding ± 10% are considered significant and may be indicative of potential imbalance between exposure groups.

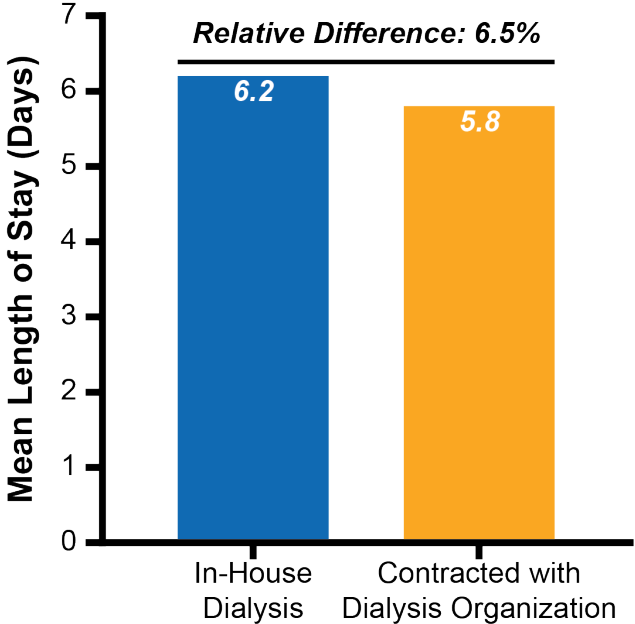
Patients admitted to hospitals contracting with the dialysis organization were more likely to be white and less likely to be black. Other patient characteristics were comparable.

Admission Causes



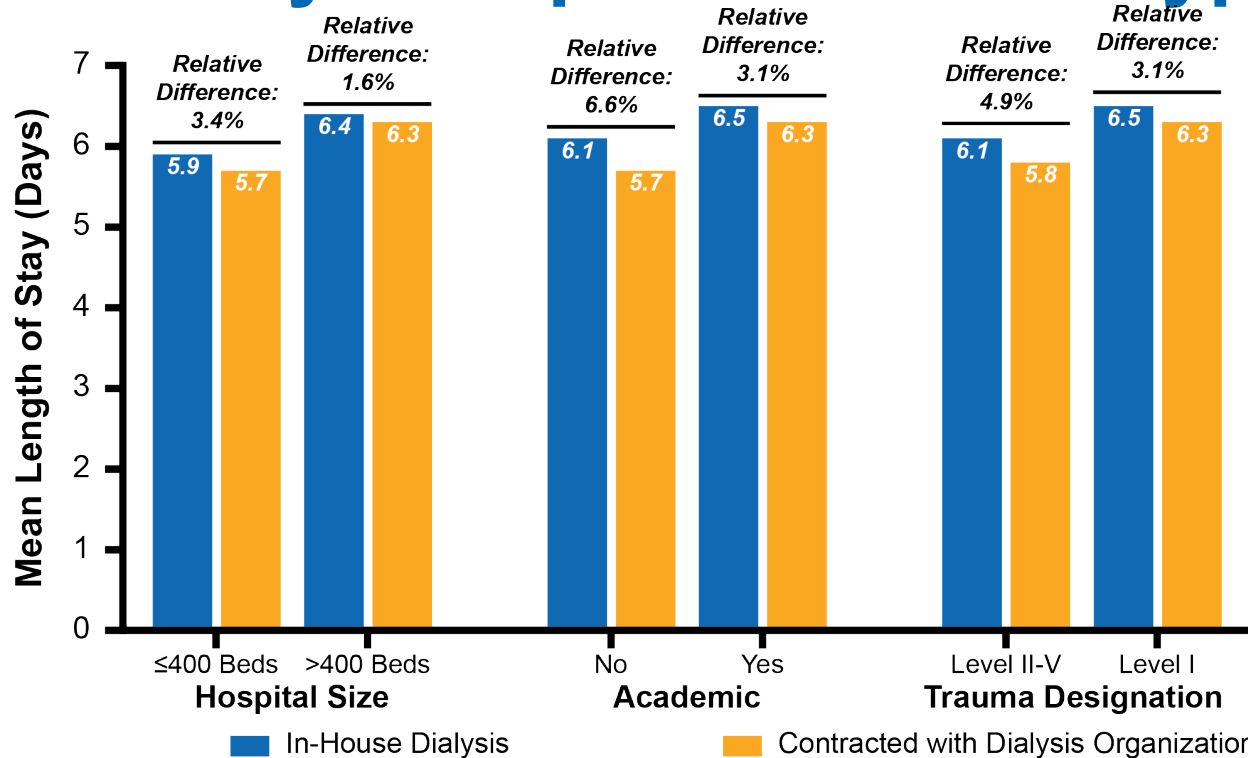
Admission causes were comparable for those admitted to hospitals providing in-house dialysis and those who were admitted to hospitals contracted with the dialysis organization

Length of Stay: All Hospitals



The mean length of stay was 6.5% shorter for patients admitted to hospitals contracting with the dialysis organization relative to patients admitted to hospitals performing dialysis in-house.

Length of Stay: Hospital Size and Type



Across all hospital types and sizes, the mean length of stay was shorter for patients admitted to hospitals that contracted with the dialysis organization relative to patients admitted to hospitals performing dialysis in-house.

Conclusions

- These results suggest that use of a contracted dialysis organization may shorten the length of stay for patients who require dialysis during hospital admissions
 - This trend was more pronounced in smaller, non-university-affiliated hospitals

Limitations

- Analyses were not adjusted for patient characteristics or types of admissions
- Analyses only included hospitals contracting with a single dialysis organization and thus may not generalize to hospitals contracting with other dialysis organizations
- Analyses were performed at the hospitalization level and some patients contributed more than one hospitalization to the data. Multiple observations were not accounted for in the analysis