

Supplemental Material

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Supplement Text 1. Examining staffing ratios and dialysis station in VA vs. non-VA facilities.

Supplement Table 1. Distribution of veteran patients initiating dialysis in a VA vs. non-VA dialysis provider per year.

Incidence Year	VA patients n [%]	non-VA patients n [%]
2007	342 [13]	2253 [87]
2008	1236 [12]	9151 [88]
2009	1255 [12]	9483 [88]
2010	1229 [12]	9434 [88]
2011	1162 [11]	9151 [89]
2012	1119 [11]	9477 [89]
2013	990 [9]	9647 [91]
2014	251 [9]	2547 [91]

Supplement Table 2. Top 20 causes of 12-month hospitalization admissions by VA vs. non-VA provider.

Rank	Non- VA top 20 hospitalization admission causes	Rank	VA top 20 hospitalization admission causes
1	Complication of device; implant or graft	1	Complication of device; implant or graft
2	Septicemia (except in labor)	2	Hypertension with complications and secondary hypertension
3	Congestive heart failure; nonhypertensive	3	Chronic kidney disease
4	Hypertension with complications and secondary hypertension	4	Septicemia (except in labor)
5	Chronic kidney disease	5	Pneumonia (except that caused by tuberculosis or sexually transmitted disease)
6	Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	6	Diabetes mellitus with complications
7	Diabetes mellitus with complications	7	Congestive heart failure; nonhypertensive
8	Coronary atherosclerosis and other heart disease	8	Coronary atherosclerosis and other heart disease
9	Fluid and electrolyte disorders	9	Fluid and electrolyte disorders
10	Cardiac dysrhythmias	10	Cardiac dysrhythmias
11	Rehabilitation care; fitting of prostheses; and adjustment of devices	11	Complications of surgical procedures or medical care
12	Complications of surgical procedures or medical care	12	Acute myocardial infarction
13	Acute myocardial infarction	13	Nonspecific chest pain
14	Respiratory failure; insufficiency; arrest (adult)	14	Respiratory failure; insufficiency; arrest (adult)
15	Deficiency and other anemia	15	Other circulatory disease
16	Other circulatory disease	16	Gastrointestinal hemorrhage
17	Gastrointestinal hemorrhage	17	Urinary tract infections
18	Urinary tract infections	18	Deficiency and other anemia
19	Other nervous system disorders	19	Skin and subcutaneous tissue infections
20	Acute cerebrovascular disease	20	Acute cerebrovascular disease

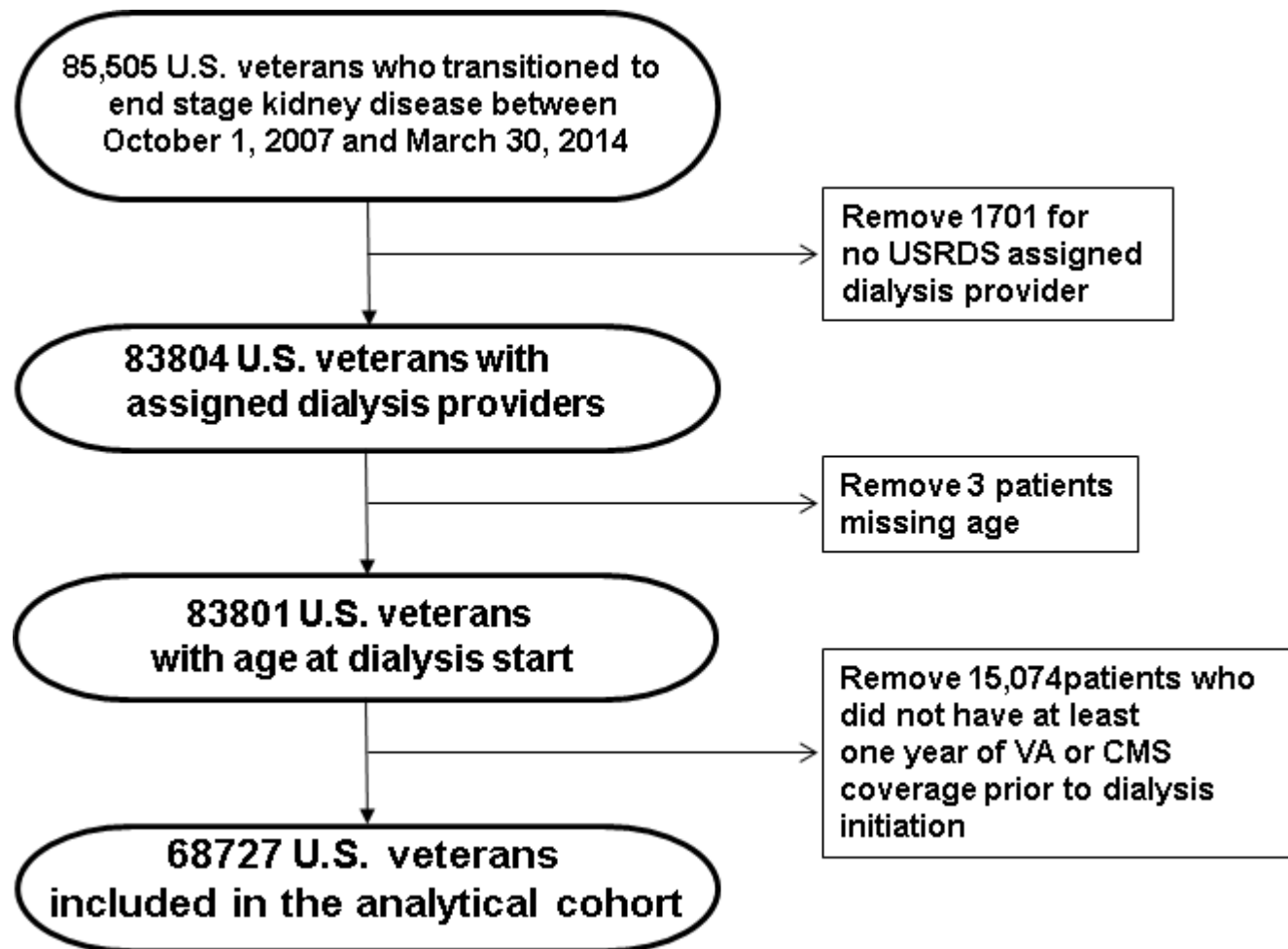
Supplement Table 3. All-Cause Mortality Hazard Ratios according to baseline VA vs. non-VA dialysis provider over 12 months of follow up in sensitivity analysis with considerations for nephrology visits in the year prior to transition, hospital-based providers, and For-Profit and Non-Profit Providers.

Had at least one VA outpatient nephrology visit in the year prior to transition					Unadjusted		case-mix		fully adjusted	
	n	mortality n (row %)	Cohort years (100 person years)	mortality rate per 100 person years	HR (95% CI)	p-value	HR (95% CI)	p-value	HR (95% CI)	p-value
VA	6,149	940 (15)	5,521	17 (16, 18)	0.80 (0.74, 0.86)	<0.001	0.90 (0.83, 0.97)	0.005	0.96 (0.89, 1.04)	0.3
non-VA	12,973	2,399 (18)	12,259	21 (20, 22)	1-referent		1-referent		1-referent	
Hospital-Based Providers					Unadjusted		case-mix		fully adjusted	
	n	mortality n (row %)	Cohort years (100 person years)	mortality rate per 100 person years	HR (95% CI)	p-value	HR (95% CI)	p-value	HR (95% CI)	p-value
VA	7,393	1,348 (18)	6,496	21 (20, 22)	0.55 (0.51, 0.59)	<0.001	0.85 (0.78, 0.92)	0.0002	0.96 (0.88, 1.06)	0.4
non-VA	5,745	1,735 (30)	4,557	38 (36, 40)	1-referent		1-referent		1-referent	
VA vs. Other Non-Profit Providers					Unadjusted		case-mix		fully adjusted	
	n	mortality n (row %)	Cohort years (100 person years)	mortality rate per 100 person years	HR (95% CI)	p-value	HR (95% CI)	p-value	HR (95% CI)	p-value
VA	7,584	1,376 (18)	6,664	21(20, 22)	0.57 (0.54, 0.61)	<0.001	0.85 (0.79, 0.92)	<0.001	0.96 (0.89, 1.04)	1
non-VA	9,587	2,776 (29)	7,629	36 (35,38)	1-referent		1-referent		1-referent	
VA vs. For Profit and Other Non-Profit Providers					Unadjusted		case-mix		fully adjusted	
	n	mortality n (row %)	Cohort years (100 person years)	mortality rate per 100 person years	HR (95% CI)	p-value	HR (95% CI)	p-value	HR (95% CI)	p-value
VA	7,584	1,376 (18)	6,664	21(20, 22)	0.55 (0.52, 0.58)	<0.001	0.78 (0.74, 0.83)	<0.001	0.86 (0.81, 0.91)	<0.001
Non-profit (non-VA)	9,587	2,776 (29)	7,629	36 (35,38)	0.96 (0.92, 1.00)	0.6	0.91 (0.87, 0.95)	<0.001	0.89 (0.86, 0.93)	<0.001
For profit	51,005	12,157 (30)	39,993	38 (37, 39)	1-referent		1-referent		1-referent	

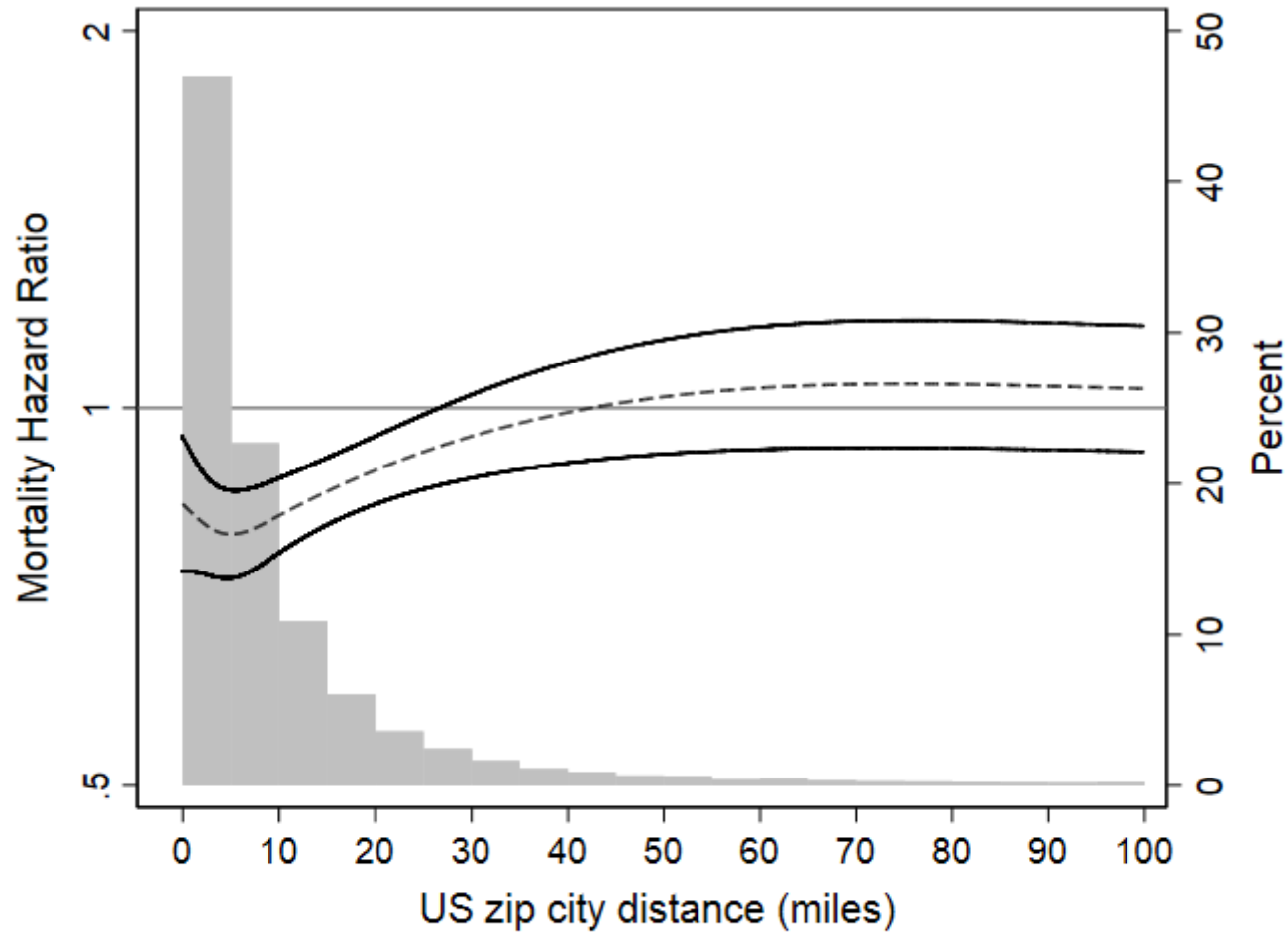
Supplement Table 4. All-Cause Mortality Hazard Ratios and Hospitalization Rate Ratios according to baseline VA vs. non-VA dialysis provider over 12 months of follow up in 68,727 veterans using as-treated censoring at time of transfer to another facility.

As Treated Mortality (Sensitivity Analysis)										
					Unadjusted		case-mix		fully adjusted	
	n	mortality n (row %)	Cohort years (100 person years)	mortality rate per 100 person years	HR (95% CI)	p-value	HR (95% CI)	p-value	HR (95% CI)	p-value
VA	7,584	745 [10]	3,522	21 (20,23)	0.56 (0.52, 0.60)	<0.001	0.83 (0.77, 0.90)	<0.001	0.87 (0.81, 0.94)	<0.001
non-VA	61,143	18,004 [29]	47,825	38 (37, 38)	1-referent		1-referent		1-referent	
As Treated Mortality Eliminating Patients Censored in the First 30 days (Sensitivity Analysis)										
					Unadjusted		case-mix		fully adjusted	
	n	mortality n (row %)	Cohort years (100 person years)	mortality rate per 100 person years	HR (95% CI)	p-value	HR (95% CI)	p-value	HR (95% CI)	p-value
VA	4,822	659 (14)	3,429	19 (18,21)	0.57, (0.53, 0.62)	<0.001	0.84 (0.78, 0.91)	<0.001	0.89 (0.82, 0.96)	0.004
non-VA	58,939	16,133 (27)	47,719	34 (33, 34)	1-referent		1-referent		1-referent	
As Treated Hospitalization (Sensitivity Analysis)										
					Unadjusted		case-mix		fully adjusted	
	n	hospitalizations	Cohort years (100 person years)	hospitalization rate per 100 person years	IRR (95% CI)	p-value	IRR (95% CI)	p-value	IRR (95% CI)	p-value
VA	7,584	8,309	3,523	236 (231, 241)	1.08 (1.04, 1.13)	<0.001	1.15 (1.11, 1.20)	<0.001	1.19 (1.14, 1.24)	<0.001
non-VA	61,143	101,688	47,825	213 (211, 214)	1-referent		1-referent		1-referent	

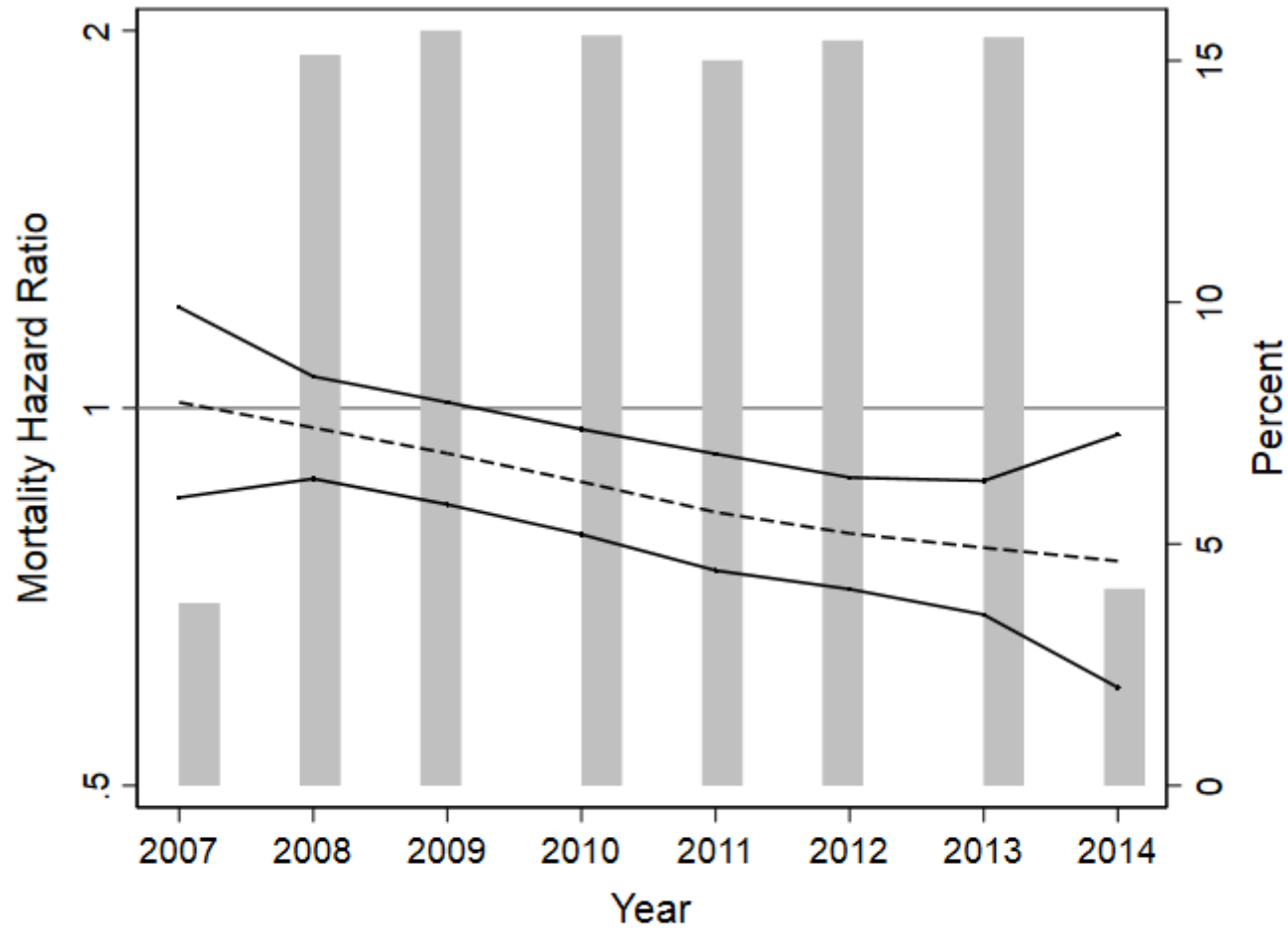
Supplement Figure 1. Cohort Construction.



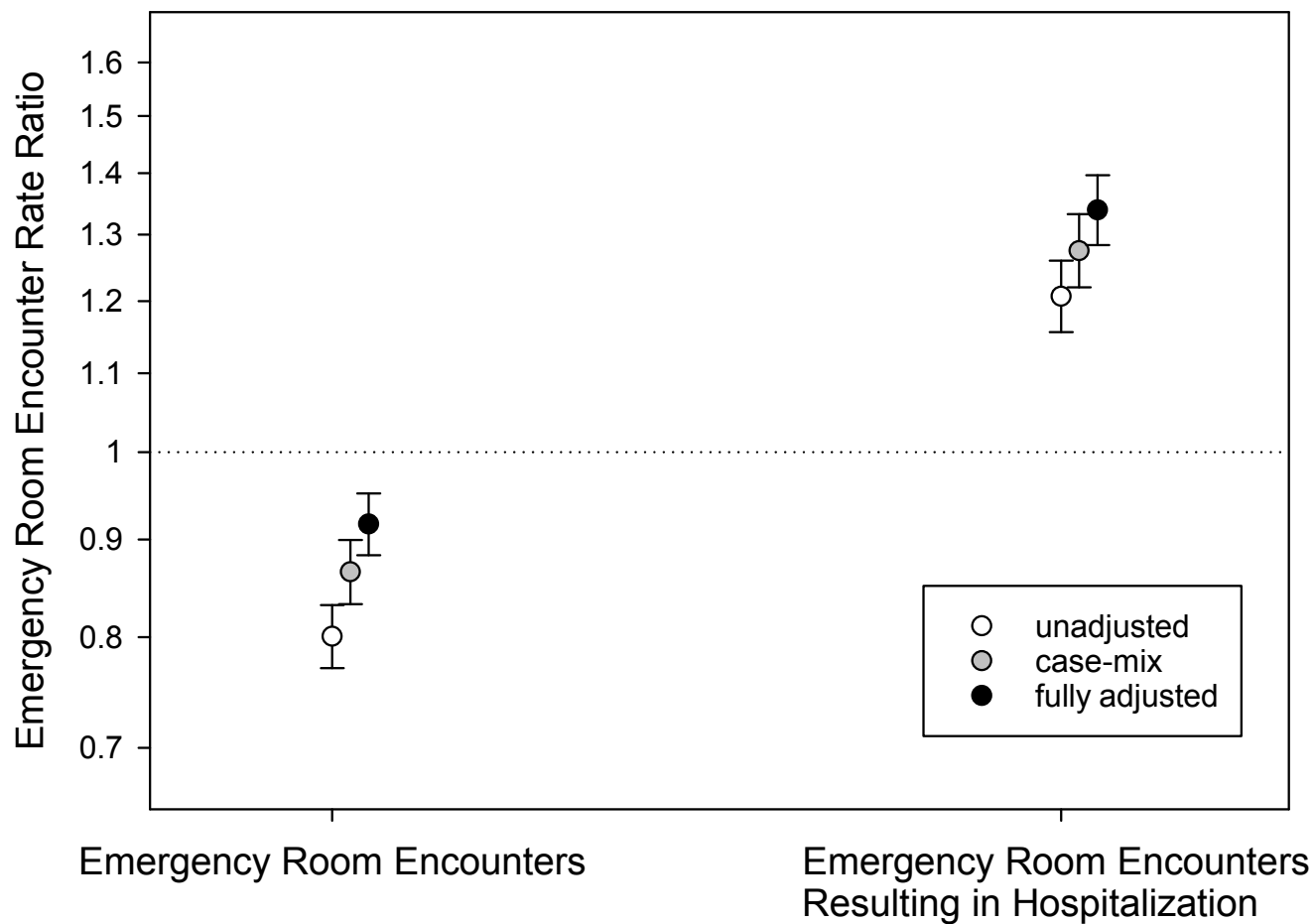
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Supplement Figure 4. Association of VA vs. non-VA baseline provider with emergency room encounters and hospitalized emergency room encounters in the first year post-dialysis initiation across 3 models of multivariable adjustment.



Supplement Text 1. Examining staffing ratios and dialysis station in VA vs. non-VA facilities.

In supplemental analysis, we examined staffing ratios in VA vs. non-VA facilities. According to methods guided by the USRDS reference guide, we summed the mean number of all full-time staff reported over the duration of the study (year 2007-2014), including Advanced Practice Nurses, Licensed Practical/Visiting Nurses, Patient Care Technicians, and Registered Nurses). We then divided this full-time staff total by number of facilities (73 VA vs. 6613 non-VA). We also obtained the median number of dialysis stations reported in VA vs. non-VA facilities over duration of the study.

We found that the ratio of total full-time staff, including nurses and patient care technicians, per number of facilities was larger in VA (13:1) compared to non-VA facilities (10:1). In addition, VA facilities had fewer stations (median 12 [9, 15], compared to non-VA facilities (median: 17 [12, 22]).