Supplemental Material

Supplemental Table 1: Adjusted Cox proportional mortality hazards models among US veterans with an AKI hospitalization, 2009 to 2017. Death is censored at hospital discharge (in-hospital) and one-year.

Supplemental Table 2: Unadjusted and adjusted Cox proportional mortality hazard models among patients with and without AKI hospitalization, 2009 to 2017. Mortality is censored as hospital discharge (in-hospital) *and one-year.* Year is included as a categorical variable.

Supplemental Table 1: Adjusted Cox proportional mortality hazards models among US veterans with an AKI hospitalization, 2009 to 2017. Death is censored at hospital discharge (in-hospital) and one-year.

	In-Hospital			One-Year		
	N at Risk	N Deaths	HR (95% CI)	N at Risk	N Deaths	HR (95% CI)
Year	548782	31973	0.994 (0.992, 0.996)	548782	147014	0.995 (0.993, 0.997)
Female	17174	745	0.63 (0.61, 0.66)	17174	3020	0.64 (0.61, 0.66)
Age (ref. is 22-49)						
50-59	221534	3377	1.75 (1.67, 1.84)	221534	13521	1.75 (1.66, 1.84)
60-69	606161	10335	1.46 (1.40, 1.54)	606161	44963	1.47 (1.40, 1.54)
70+	1182306	17626	1.44 (1.37, 1.51)	1182306	86242	1.44 (1.38, 1.51)
Race (ref group is white						
Black	385185	5895	0.81 (0.79, 0.82)	385185	27768	0.80 (0.79, 0.82)
Other	254448	5463	1.20 (1.18, 1.22)	254448	21378	1.20 (1.18, 1.22)
Hypertension	952322	13490	0.81 (0.80, 0.83)	952322	70242	0.82 (0.81, 0.83)
Diabetes and CKD (ref is none)						
Diabetes only	110957	4963	0.84 (0.82, 0.85)	110957	23839	0.84 (0.83, 0.86)
CKD only	88736	5391	1.24 (1.22, 1.26)	88736	28900	1.25 (1.23, 1.27)
Both Diabetes & CKD	84929	3427	1.05 (1.04, 1.07)	84929	23233	1.06 (1.04, 1.08)
Myocardial Infarction	19268	1508	1.20 (1.16, 1.24)	19268	6260	1.19 (1.16, 1.23)
Peripheral Vascular Disease	49402	3171	1.17 (1.15, 1.20)	49402	15273	1.17 (1.15, 1.20)
Cancer	11838	1583	3.44 (3.35, 3.54)	11838	7794	3.44 (3.34, 3.53)
Liver Disease	22606	2329	1.99 (1.94, 2.04)	22606	9839	1.99 (1.94, 2.04)
COPD	101899	6979	1.31 (1.29, 1.33)	101899	32849	1.31 (1.29, 1.33)
CVA or TIA	46445	3171	1.24 (1.21, 1.26)	46445	14493	1.23 (1.21, 1.26)
AKI Stage (ref=Stage 1)						
AKI Stage 2	18375	2381	1.24 (1.20, 1.28)	18375	6014	1.23 (1.19, 1.27)
AKI Stage 3 without dialysis	55450	6661	1.44 (1.41, 1.46)	55450	19706	1.43 (1.40, 1.45)
AKI with dialysis	23530	3759	1.32 (1.29, 1.36)	23530	9474	1.29 (1.26, 1.33)
Surgical DRG	207396	10150	0.96 (0.95, 0.97)	207396	53702	0.96 (0.94, 0.97)
ICU	122307	12217	0.95 (0.93, 0.96)	122307	36524	0.95 (0.94, 0.96)
Mechanical Ventilation	42095	14632	2.47 (2.42, 2.52)	42095	22748	2.41 (2.36, 2.46)
Sepsis	50858	12072	1.68 (1.65, 1.71)	50858	23345	1.66 (1.63, 1.69)
Vasopressors Used During Stay	54685	4765	1.04 (1.02, 1.06)	54685	16547	1.02 (1.01, 1.04)
Length of stay	---	---	---	548782	147014	0.995 (0.993, 0.997)

Abbreviations: AKI, acute kidney injury; CKD, chronic kidney disease; ICU, intensive care unit; HR, hazard ratio; CI, confidence interval.

Supplemental Table 2: Unadjusted and adjusted Cox proportional mortality hazard models among patients with and without AKI hospitalization, 2009 to 2017. Mortality is censored as hospital discharge (in-hospital) *and one-year.* Year is included as a categorical variable.

	Unadjusted	Model 1[a]	Model 2[b]	Model 3[c]
In-Hospital		Hazards Ratio (95% Confidence Interval)		
AKI				
2009	ref	ref	ref	Ref
2010	0.97 (0.91, 1.03)	0.97 (0.91, 1.03)	0.96 (0.90, 1.02)	0.95 (0.90, 1.01)
2011	0.97 (0.92, 1.03)	0.97 (0.91, 1.03)	0.97 (0.91, 1.03)	0.96 (0.90, 1.02)
2012	1.00 (0.94, 1.06)	1.00 (0.95, 1.06)	0.99 (0.93, 1.05)	0.95 (0.89, 1.01)
2013	0.96 (0.91, 1.02)	0.97 (0.91, 1.03)	0.95 (0.89, 1.01)	0.89 (0.84, 0.95)
2014	0.92 (0.87, 0.98)	0.92 (0.87, 0.98)	0.90 (0.85, 0.96)	0.85 (0.80, 0.91)
2015	0.94 (0.88, 0.99)	0.94 (0.88, 1.00)	0.92 (0.87, 0.98)	0.88 (0.83, 0.94)
2016	0.90 (0.85, 0.96)	0.91 (0.86, 0.97)	0.87 (0.82, 0.93)	0.89 (0.83, 0.95)
2017	0.89 (0.83, 0.94)	0.89 (0.84, 0.95)	0.85 (0.80, 0.91)	0.89 (0.83, 0.95)
Non-AKI				
2009	ref	ref	ref	ref
2010	1.07 (0.99, 1.15)	1.07 (0.99, 1.15)	1.05 (0.97, 1.13)	1.01 (0.93, 1.09)
2011	1.09 (1.01, 1.17)	1.08 (1.00, 1.17)	1.07 (0.99, 1.15)	1.03 (0.95, 1.11)
2012	1.05 (0.97, 1.13)	1.05 (0.98, 1.14)	1.03 (0.96, 1.12)	0.98 (0.90, 1.06)
2013	1.13 (1.05, 1.22)	1.14 (1.06, 1.23)	1.09 (1.01, 1.18)	0.99 (0.92, 1.07)
2014	0.97 (0.90, 1.05)	0.99 (0.91, 1.07)	0.94 (0.87, 1.02)	0.85 (0.78, 0.92)
2015	0.99 (0.91, 1.07)	1.01 (0.90, 1.09)	0.94 (0.87, 1.02)	0.84 (0.77, 0.91)
2016	0.98 (0.91, 1.07)	1.01 (0.93, 1.09)	0.96 (0.89, 1.04)	0.95 (0.87, 1.03)
2017	0.97 (0.90, 1.06)	0.99 (0.92, 1.08)	0.94 (0.86, 1.02)	0.92 (0.85, 1.00)
One-Year				
AKI				
2009	ref	ref	ref	ref
2010	0.98 (0.96, 1.01)	0.98 (0.96, 1.01)	0.97 (0.94, 0.99)	0.95 (0.92, 0.97)
2011	0.96(0.94, 0.98)	0.96 (0.94, 0.99)	0.96 (0.94, 0.99)	0.95 (0.92, 0.97)
2012	0.96 (0.93, 0.98)	0.96 (0.94, 0.99)	0.94 (0.92, 0.97)	0.92 (0.90, 0.95)
2013	0.96 (0.93, 0.98)	0.96 (0.94, 0.99)	0.94 (0.91, 0.96)	0.92 (0.89, 0.94)
2014	0.95 (0.93, 0.98)	0.96 (0.93, 0.98)	0.93 (0.90, 1.00)	0.90 (0.87, 0.92)
2015	0.96 (0.94, 0.99)	0.97 (0.95, 1.00)	0.94 (0.92, 0.96)	0.92 (0.89, 0.94)
2016	0.94 (0.91, 0.96)	0.95 (0.92, 0.97)	0.89 (0.87, 0.91)	0.89 (0.87, 0.91)
2017	0.95 (0.92, 0.97)	0.96 (0.94, 0.99)	0.90 (0.88, 0.93)	0.90 (0.88, 0.93)
Non-AKI				
2009	ref	ref	ref	ref
2010	1.02 (1.01, 1.04)	1.03 (1.01, 1.05)	1.02 (1.00, 1.04)	1.00 (0.99, 1.02)
2011	1.01 (1.00, 1.03)	1.02 (1.01, 1.04)	1.01 (0.99, 1.02)	0.99 (0.97, 1.01)
2012	1.02 (1.00, 1.04)	1.03 (1.02, 1.05)	1.00 (0.98, 1.02)	0.98 (0.97, 1.00)
2013	1.04 (1.02, 1.06)	1.06 (1.04, 1.08)	1.02 (1.00, 1.03)	1.00 (0.98, 1.01)
2014	1.05 (1.03, 1.06)	1.07 (1.05, 1.09)	1.01 (0.99, 1.03)	0.98 (0.96, 1.00)
2015	1.04 (1.02, 1.06)	1.07 (1.05, 1.08)	0.99 (0.97, 1.01)	0.96 (0.95, 0.98)
2016	1.03 (1.01, 1.05)	1.06 (1.04, 1.08)	0.98 (0.96, 0.99)	0.96 (0.94, 0.98)
2017	1.03 (1.01, 1.05)	1.07 (1.05, 1.09)	0.98 (0.96, 0.99)	0.96 (0.95, 0.98)

[a]Model 1 includes patients demographics, including preadmission age, gender, and race (black or other).

[b]Model 2 contains model 1 + pre-hospital comorbid diseases, including hypertension, diabetes mellitus, chronic kidney disease, congestive heart failure, myocardial infarction, peripheral vascular disease, malignancy, liver disease, chronic obstructive pulmonary disease, and cerebrovascular disease.

[c]Model 3 contains model 2 + acute hospitalization characteristcs, including AKI stage, mechanical ventilation, intensive care unit utilization, sepsis, vasopressor use, hospital length of stay and primary admitting service (surgical versus other).