

1 **Supplemental Online Material**

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eTable 1.Characteristics of patients with non-elective admissions for diverticulitis by UV quartile

Analyte	Quartile ^a							
	UV1		UV2		UV3		UV4	
	N ^b	Percent	N	Percent	N	Percent	N	Percent
Overall	8.04		8.07		8.10		8.16	
Sex								
Female	4.91	61.1%	4.96	61.5%	4.97	61.3%	4.98	61.0%
Male	3.12	38.8%	3.10	38.4%	3.13	38.6%	3.17	38.9%
Race								
White	4.14	51.5%	4.14	51.3%	4.21	51.9%	4.27	52.3%
Black	0.80	9.9%	0.80	10.0%	0.79	9.8%	0.79	9.7%
Not Reported	2.15	26.7%	2.16	26.7%	2.17	26.8%	2.18	26.8%
Age								
≥ 60 years	3.90	48.6%	3.79	47.0%	3.93	48.5%	4.08	50.0%
< 60 years	4.13	51.4%	4.28	53.0%	4.17	51.5%	4.08	50.0%
Hospital Location								
Rural	1.14	14.2%	1.14	14.1%	1.15	14.2%	1.19	14.6%
Urban	6.89	85.7%	6.92	85.7%	6.94	85.7%	6.96	85.3%

^aQuartiles of UV irradiance, UV1 – lowest UV exposure quartile, UV4 –highest UV exposure quartile^bIn millions of admissions

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eTable 2. Rate of non-elective admission for diverticulitis, by UV quartile and subgroup

	Rate of admission, all quartiles ^a	Rate of admission, UV1	Rate of admission, UV4	p-value ^b	Difference in rate, UV1-UV4	p-heterogeneity ^c
Overall	696.9 (72.7)	751.8 (66.7)	668.1 (36.9)	<0.0001	83.7 (43.3)	
Gender						
Men	709.4 (75.1)	766.7 (75.2)	696.1 (42.7)	0.0008	70.6 (59.5)	
Women	689.7 (80.2)	742.2 (65.2)	651.0 (36.7)	<0.0001	91.2 (41.6)	0.2114
Race						
White	809.56 (102.3)	883.0 (90.5)	795.0 (46.8)	0.0004	88.0 (64.9)	
Black	428.2 (64.6)	451.7 (60.4)	398.6 (41.6)	0.0025	53.1 (66.6)	0.101
Age						
≥ 60 years	883.2 (83.4)	899.8 (90.6)	863.2 (58.2)	0.137	36.6 (59.4)	
< 60 years	522.3 (82.9)	604.3 (56.0)	495.2 (39.1)	<0.0001	109.1 (39.2)	<0.0001
Hospital Location						
Urban	644.1 (92.8)	707.3 (66.6)	646.0 (37.9)	0.001	59.6 (91.4)	
Rural	929.7 (119.5)	946.5 (92.1)	886.8 (96.0)	0.0521	61.2 (43.6)	0.94

Abbreviations: UV4 – highest UV exposure quartile, UV-1 – lowest UV exposure quartile

^aRate of non-elective admission for diverticulitis per 100,000 total adult admissions. Values are mean (standard deviation).

^bp-value compares rate in UV1 to rate in UV4 ^cp-heterogeneity compares the difference in rates in UV1 and UV4 between each subgroup

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eTable 3: Rate of non-elective hospitalization for diverticulitis in summer (third quarter) versus winter (first quarter)

Group	Rate of admission, First Quarter ^a	Rate of admission, Third Quarter	p-value ^b	% Change	p-heterogeneity
All	645.3 (54.1)	748.4 (70.6)	<.0001	16.0%	
Gender					
Male	664.2 (59.3)	757.2 (80.3)	<.0001	14.0%	
Female	633.9 (57.6)	744.1 (74.5)	<.0001	17.4%	0.193
Race					
Black	401.3 (39.3)	443.7 (79.6)	0.02	10.6%	<0.0001
White	743.5 (78.8)	876.7 (100.6)	<.0001	17.9%	
Age					
< 60 years	486.2 (76.5)	551.0 (90.4)	0.0087	13.3%	<0.0001
≥ 60 years	804.7 (48.1)	971.1 (62.6)	<.0001	20.7%	
Location					
Rural	853.7 (77.7)	1017.1 (103.6)	<.0001	19.1%	0.0008
Urban	593.7 (16.7)	691.8 (17.2)	0.0002	16.5%	
UV Quartile					
UV1	693.2 (54.8)	813.9 (68.1)	0.0150	17.4%	0.01 ^d
UV2	685.6 (34.3)	795.6 (42.6)	0.0020	16.0%	0.02 ^d
UV3	596.8 (16.6)	695.7 (26.8)	0.0001	16.6%	0.131 ^d
UV4	625.4 (35.1)	695.8 (21.0)	0.0049	11.2%	

Abbreviations: OR – odds ratio, CI – confidence interval, UV4 – highest UV quartile, UV3, UV2 – intermediate quartiles, UV-1 – lowest UV exposure quartile

^aRate of non-elective admission for diverticulitis per 100,000 total adult admissions. Values are mean (standard deviation).

^bp-value compares Rate^{First Quarter} to Rate^{Third Quarter}

^cMultivariate OR of admission of diverticulitis comparing subgroups includes age, gender, race, hospital location, quartiles of UV exposure, and admission year.

^dp-value compares (Rate^{Third Quarter} - Rate^{First Quarter}) between UV1 and specified UV quartile

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