

Appendix C

CARDIOVASCULAR CONDITION CLUSTER

FIGURE 1: CARDIOVASCULAR CLUSTER: PRE- AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

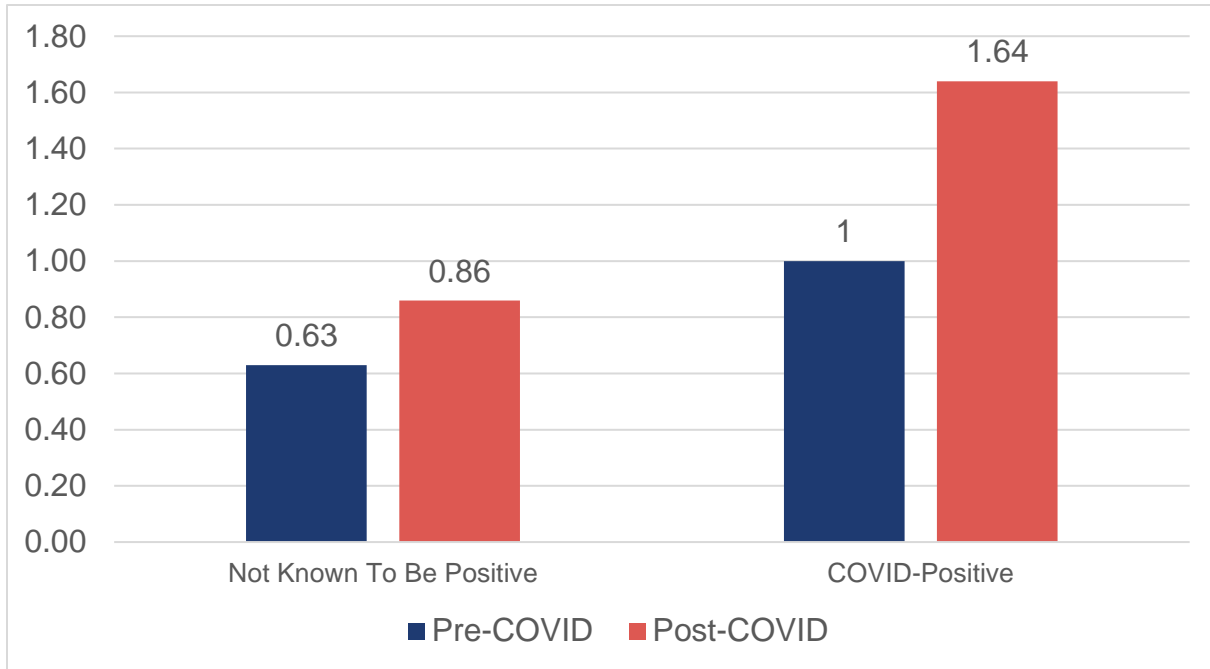


FIGURE 2: CARDIOVASCULAR CLUSTER: DIFFERENCE IN PRE- AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

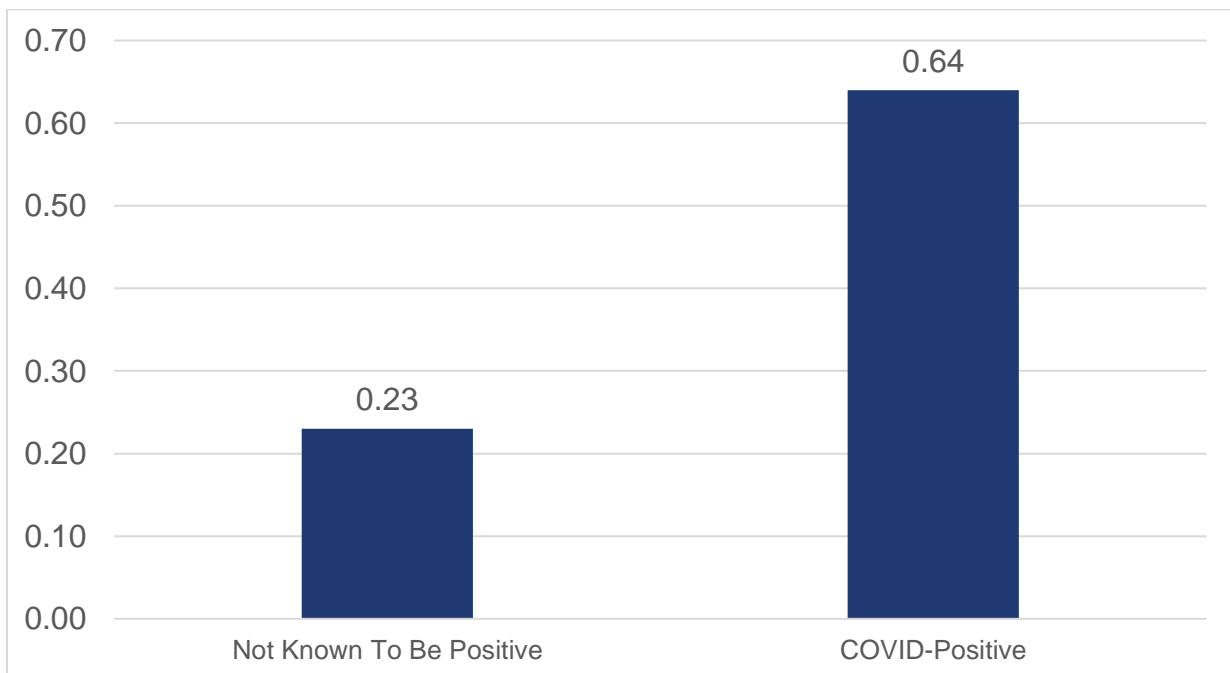


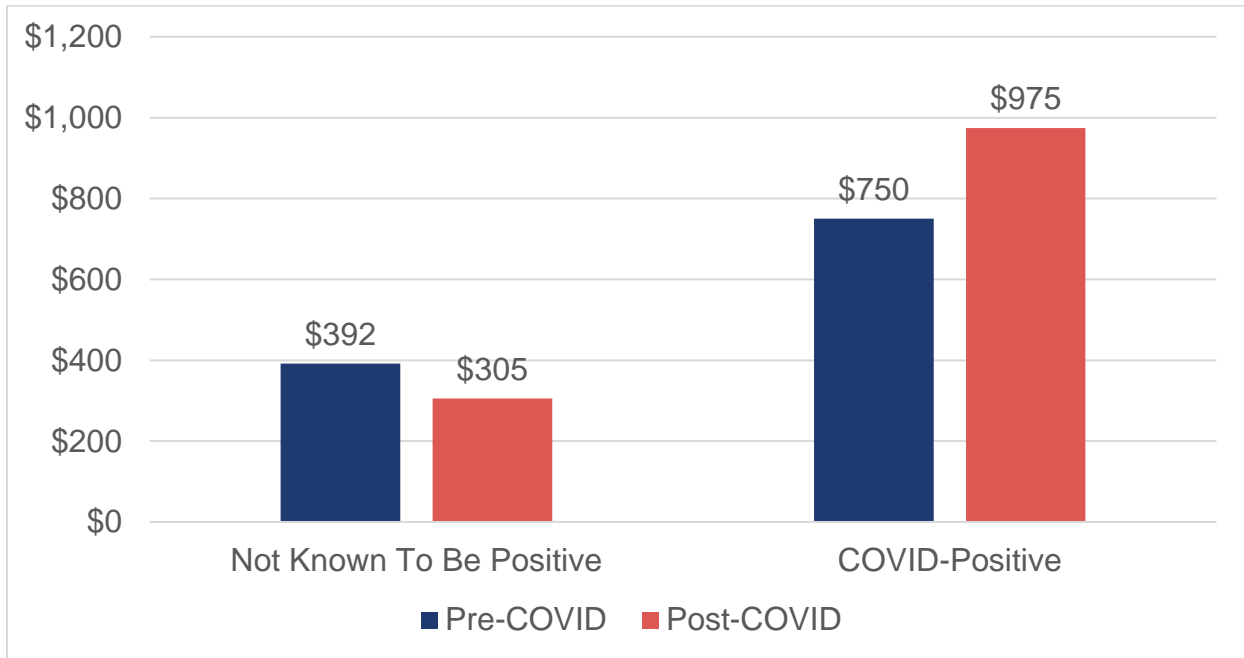
FIGURE 3: DEMOGRAPHICS OF CARDIOVASCULAR CLUSTER AND RELATIVE PERCENTAGE DIFFERENCE IN PRE- AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH FOR THOSE KNOWN TO BE POSITIVE VERSUS THOSE NOT KNOWN TO THE POSITIVE

Variable	Not Known To Be COVID-Positive			COVID-Positive			Relative Percent Difference
	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	
Sex							
Female (n=69,625)	0.63	0.90	0.27	1.01	1.70	0.69	156%
Male (n=52,224)	0.63	0.82	0.19	0.98	1.55	0.57	200%
Age							
19-44 (n=19,941)	0.34	0.50	0.16	0.38	0.67	0.29	81%
45-64 (n=53,150)	0.55	0.73	0.18	0.78	1.24	0.46	156%
65+ (n=48,758)	0.80	1.05	0.25	1.61	2.32	0.71	184%
Race & Ethnicity							
Hispanic (n=443)	0.40	0.86	0.46	0.58	0.96	0.38	-17%
Asian (n=598)	0.52	0.76	0.24	0.54	0.92	0.38	58%
Non-Hispanic Black (n=17,515)	0.80	1.10	0.30	1.12	1.71	0.59	97%
Non-Hispanic White (n=53,113)	0.69	0.97	0.28	1.03	1.68	0.65	132%
Other (n=1,074)	0.53	0.82	0.29	1.02	1.72	0.70	141%
Unknown (n=48,296)	0.49	0.65	0.16	0.52	0.99	0.47	194%
Native American (n=706)	0.78	0.95	0.17	1.29	2.31	1.02	500%
Pacific Islander (n=104)	0.90	0.99	0.09	0.40	1.22	0.82	811%
Rurality							
Small Rural (n=34,075)	0.66	0.93	0.27	1.06	1.72	0.66	144%
Large Rural (n=30,785)	0.63	0.89	0.26	1.02	1.68	0.66	154%
Large Urban (n=15,446)	0.59	0.80	0.21	1.05	1.60	0.55	162%
Small Urban (n=34,075)	0.61	0.81	0.20	0.92	1.54	0.62	210%

Note: 671 records were missing data to assign rurality.



FIGURE 4: CARDIOVASCULAR CLUSTER: AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS IN THE PRE- AND POST-COVID ERAS



INDIVIDUALS WITHOUT EVIDENCE OF A CARDIOVASCULAR CLUSTER CONDITION IN THE PRE-COVID PERIOD

FIGURE 5: CARDIOVASCULAR CLUSTER: POST-COVID-ERA CARDIOVASCULAR CLUSTER-RELATED VISITS PER MEMBER PER MONTH

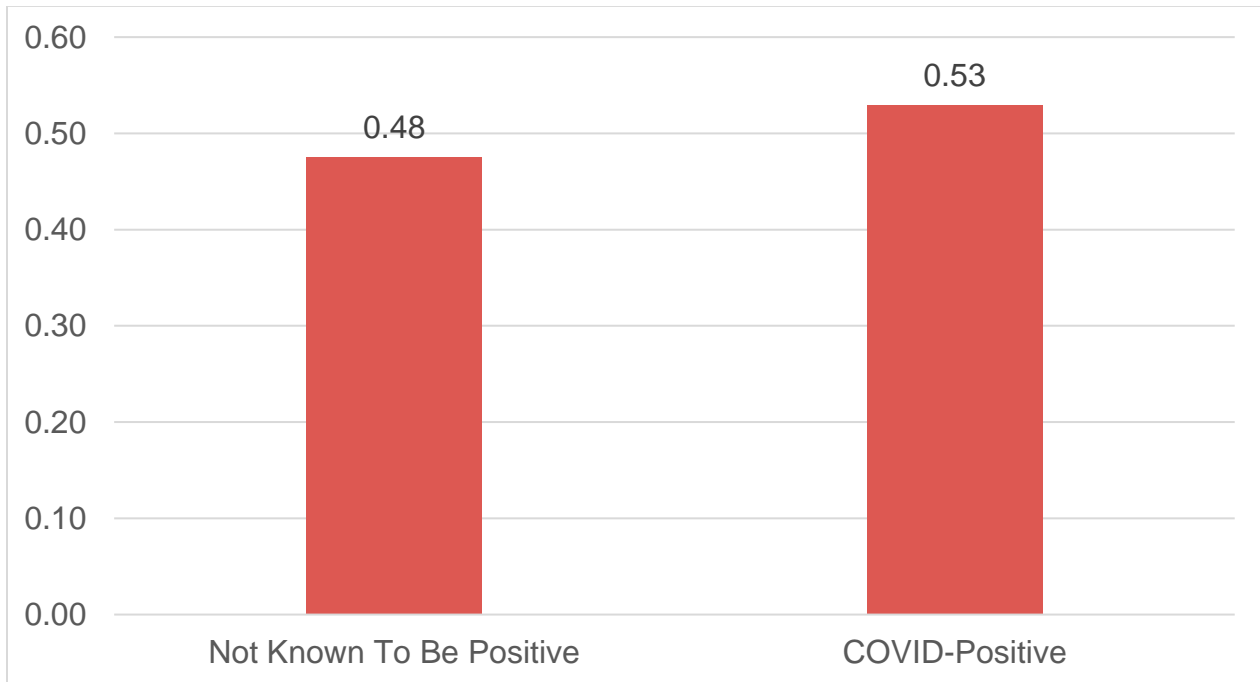


FIGURE 6: CARDIOVASCULAR CLUSTER: POST-COVID AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS



FIGURE 7: CARDIOVASCULAR CLUSTER: POST-COVID ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH VISITS AMONG COVID-POSITIVES, BY COVID-19 HOSPITALIZATION STATUS

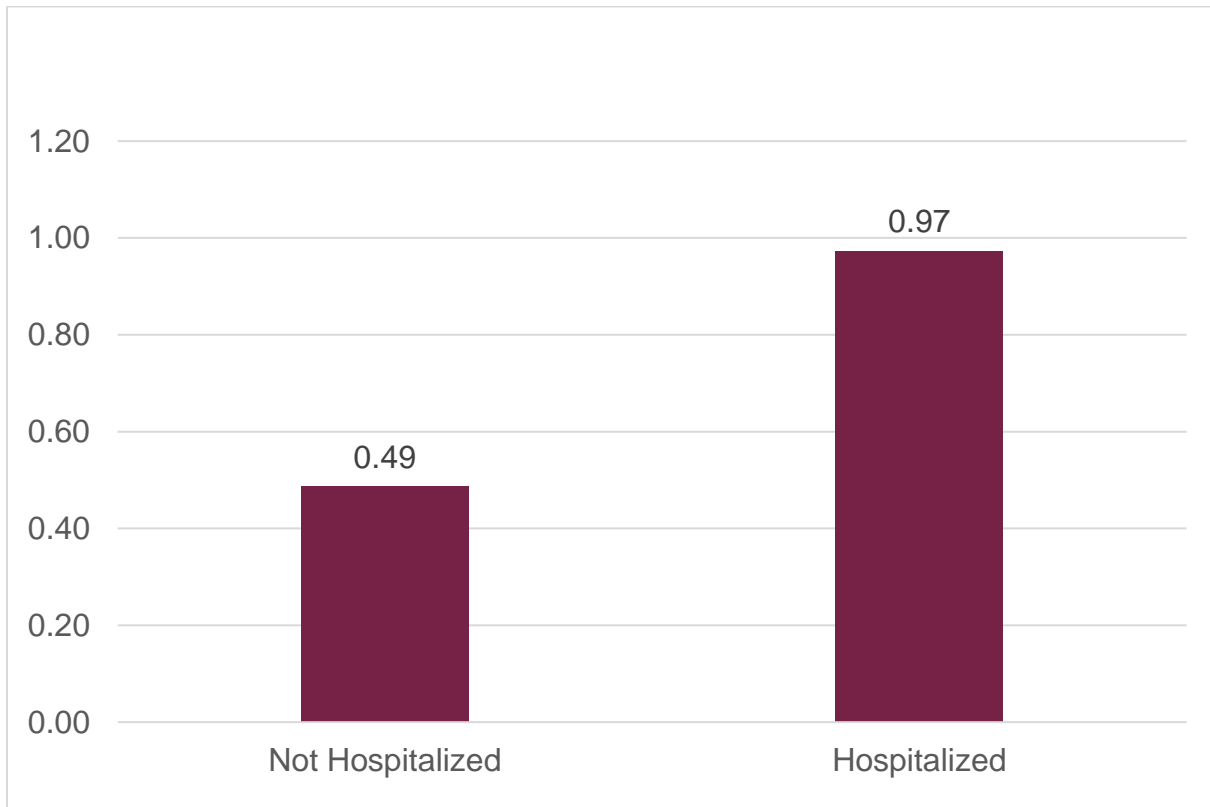
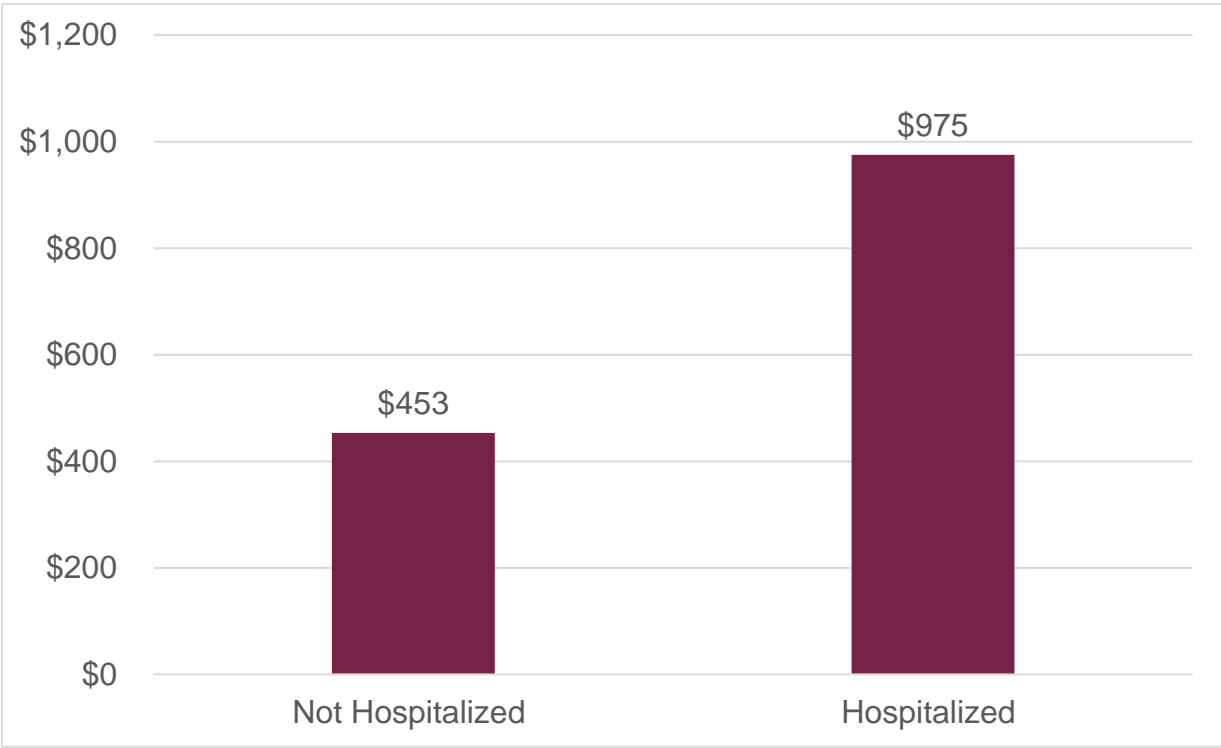


FIGURE 8: CARDIOVASCULAR CLUSTER: POST-COVID-ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH COSTS AMONG COVID-POSITIVES, BY COVID-19 HOSPITALIZATION STATUS



COGNITIVE CLUSTER

FIGURE 9: COGNITIVE CLUSTER: PRE-COVID AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

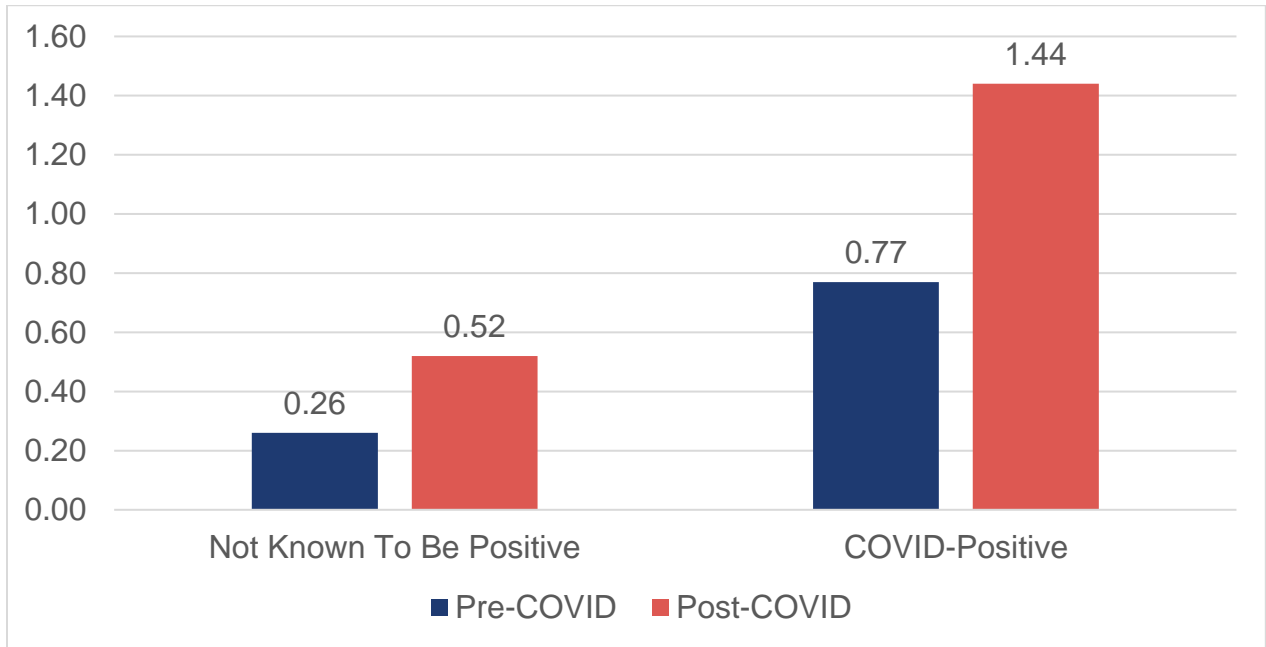


FIGURE 10: COGNITIVE CLUSTER: DIFFERENCE IN PRE-COVID AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

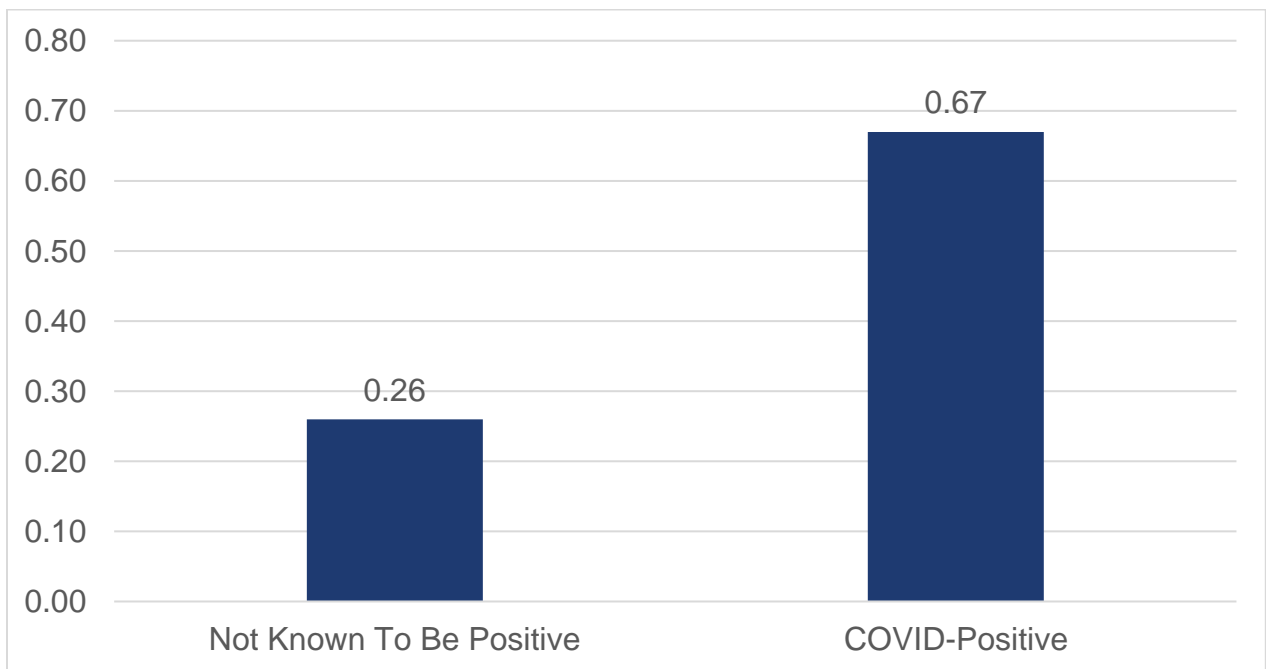


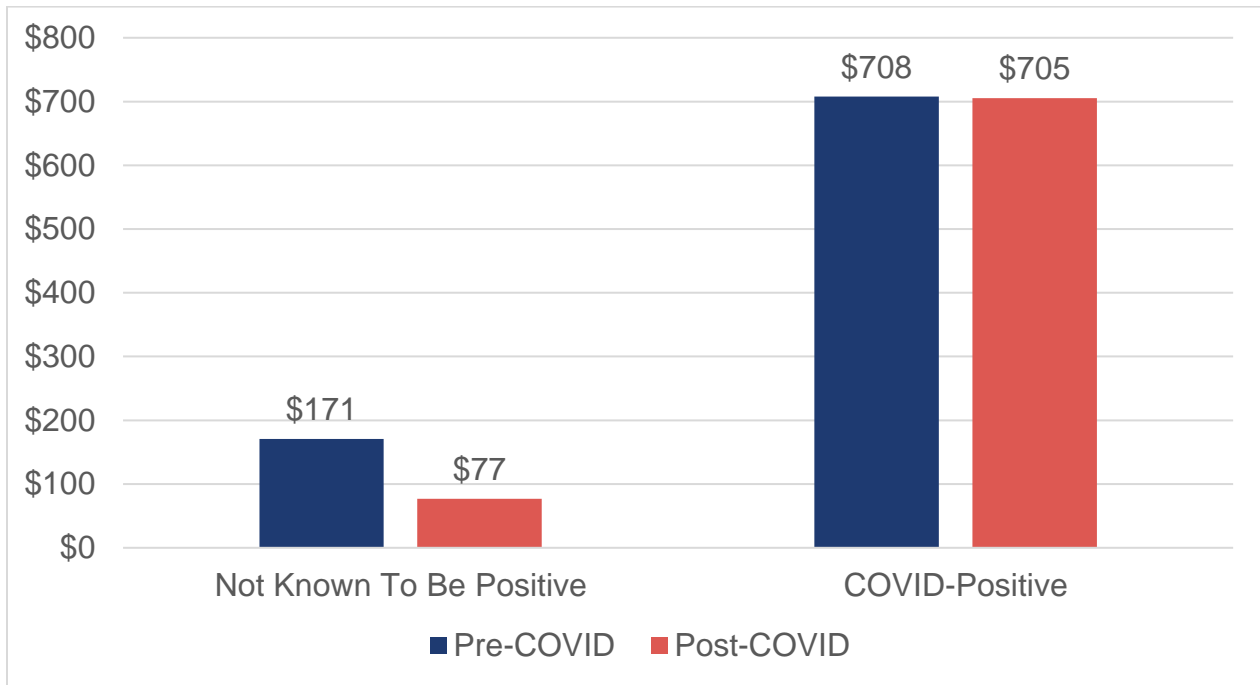
FIGURE 11: DEMOGRAPHICS OF COGNITIVE CLUSTER AND RELATIVE PERCENTAGE DIFFERENCE IN PRE- AND POST-COVID ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH FOR THOSE KNOWN TO BE POSITIVE VERSUS THOSE NOT KNOWN TO BE POSITIVE

Variable	Not Known To Be COVID-Positive			COVID-Positive			Relative Percentage Difference
	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	
Sex							
Female (n=13,522)	0.27	0.55	0.28	0.78	1.50	0.72	157%
Male (n=8,240)	0.25	0.46	0.21	0.76	1.34	0.58	176%
Age							
19-44 (n=5,568)	0.17	0.29	0.12	0.21	0.53	0.32	167%
45-64 (n=8,068)	0.23	0.43	0.20	0.51	1.10	0.59	195%
65+ (n=8,126)	0.33	0.66	0.33	1.17	1.72	0.55	67%
Race & Ethnicity							
Pacific Islander (n=24)	0.23	1.02	0.79	0.08	0.00	-0.08	-110%
Native American (n=154)	0.18	0.60	0.42	0.56	0.87	0.31	-26%
Other (n=260)	0.18	0.54	0.36	0.81	1.17	0.36	0%
Non-Hispanic Black (n=3,501)	0.29	0.57	0.28	0.75	1.29	0.54	93%
Hispanic (n=112)	0.30	0.48	0.18	0.34	0.69	0.35	94%
Non-Hispanic White (n=11,307)	0.28	0.59	0.31	0.82	1.52	0.70	126%
Unknown (n=6,297)	0.21	0.33	0.12	0.31	0.92	0.61	408%
Asian (n=107)	0.23	0.22	-0.01	0.32	0.91	0.59	6,000%
Rurality							
Small Rural (n=5,548)	0.24	0.45	0.21	0.69	1.47	0.78	271%
Large Rural (n=5,410)	0.26	0.49	0.23	0.75	1.43	0.68	196%
Small Urban (n=7,620)	0.27	0.56	0.29	0.83	1.53	0.70	141%
Large Urban (n=3,087)	0.27	0.57	0.30	0.85	1.22	0.37	23%

Note: 97 records were missing data to assign rurality.



FIGURE 12: COGNITIVE CLUSTER: AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS IN THE PRE-COVID AND POST-COVID ERAS



INDIVIDUALS WITHOUT EVIDENCE OF A CARDIOVASCULAR CLUSTER CONDITION IN THE PRE-COVID PERIOD

FIGURE 13: COGNITIVE CLUSTER: AVERAGE POST-COVID-ERA COGNITIVE CLUSTER-RELATED VISITS PER MEMBER PER MONTH

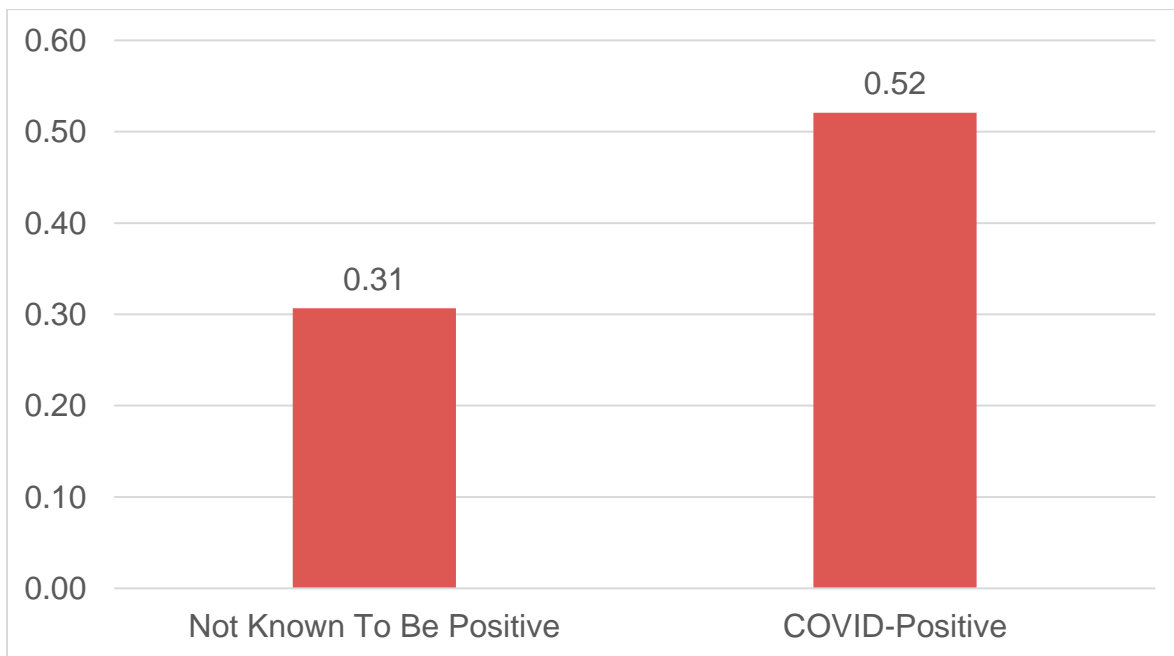


FIGURE 14: COGNITIVE CLUSTER: POST-COVID AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS

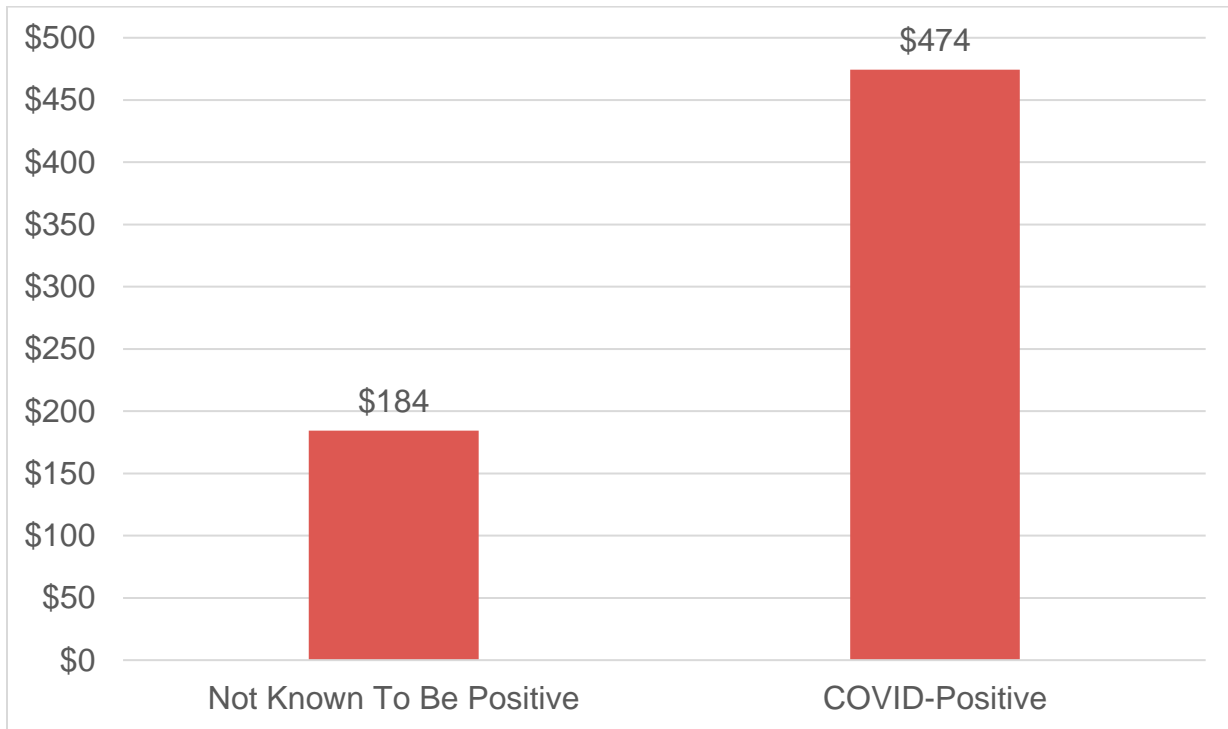


FIGURE 15: COGNITIVE CLUSTER: POST-COVID-ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH VISITS AMONG COVID-POSITIVES BY COVID-19 HOSPITALIZATION STATUS

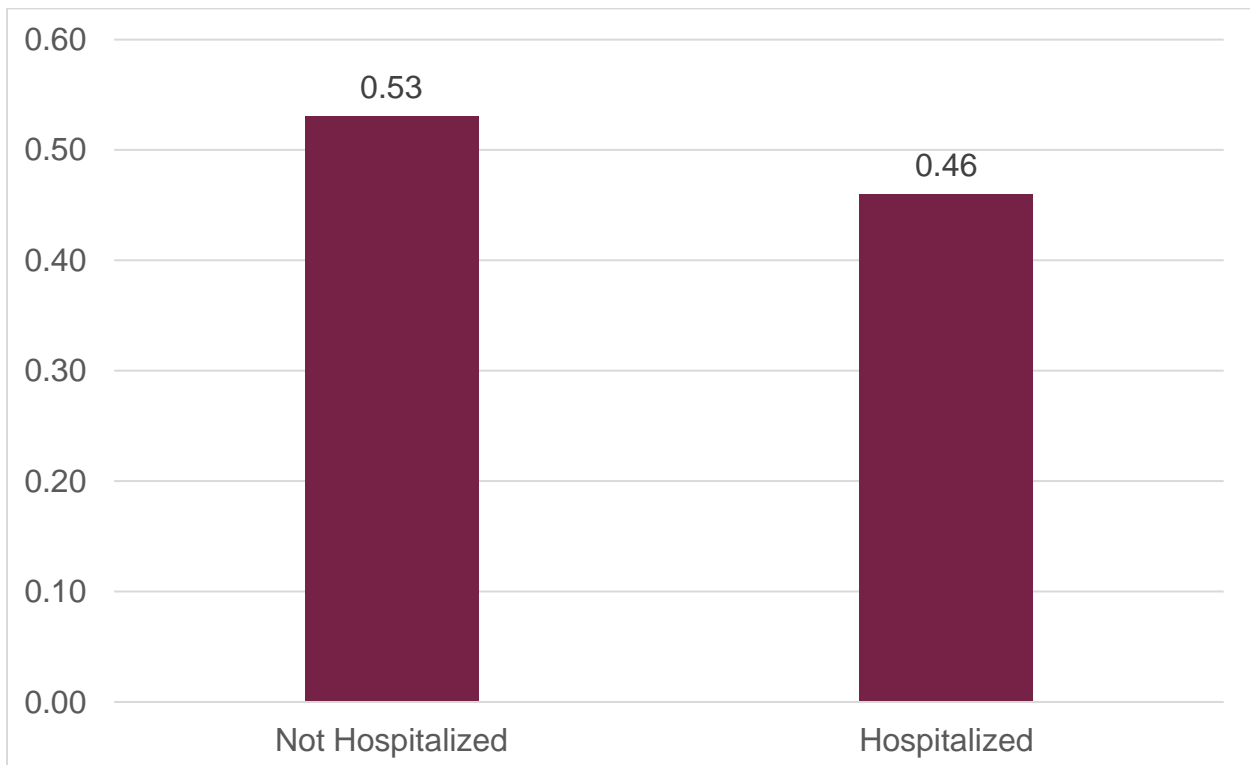
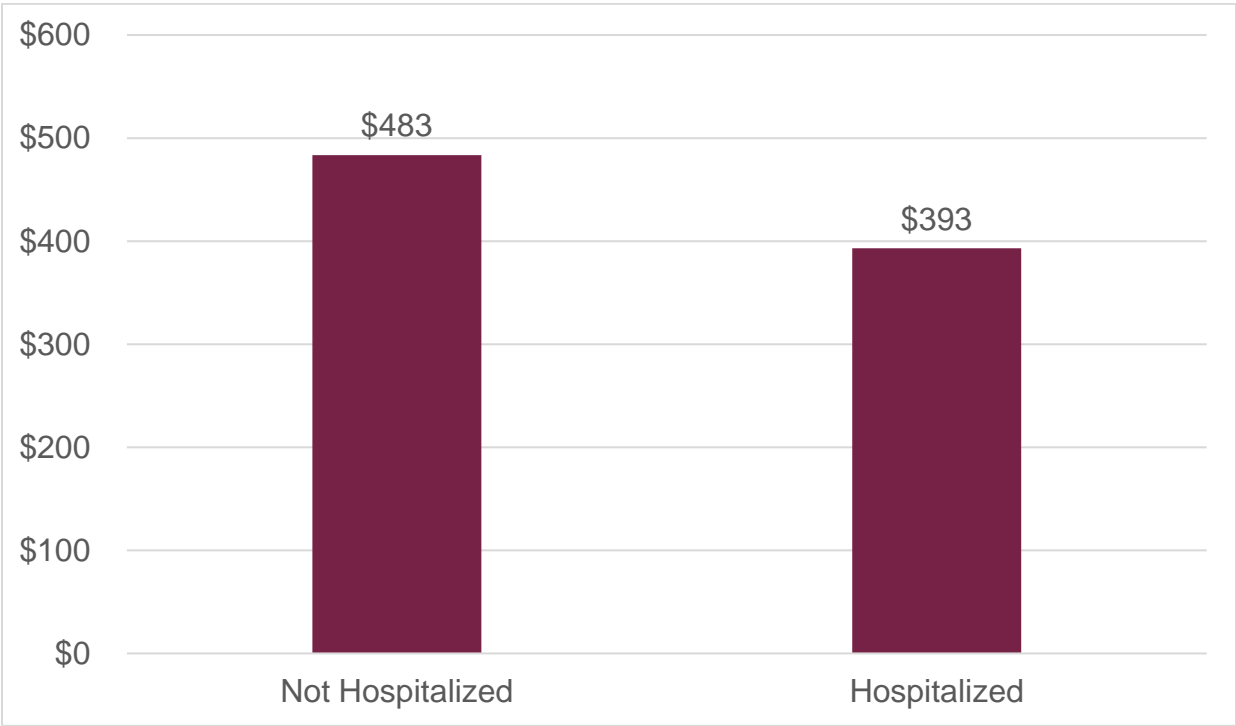


FIGURE 16: COGNITIVE CLUSTER: POST-COVID-ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH COSTS AMONG COVID-POSITIVES BY COVID-19 HOSPITALIZATION STATUS



FATIGUE CONDITION CLUSTER

FIGURE 17: FATIGUE CLUSTER: PRE-COVID AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

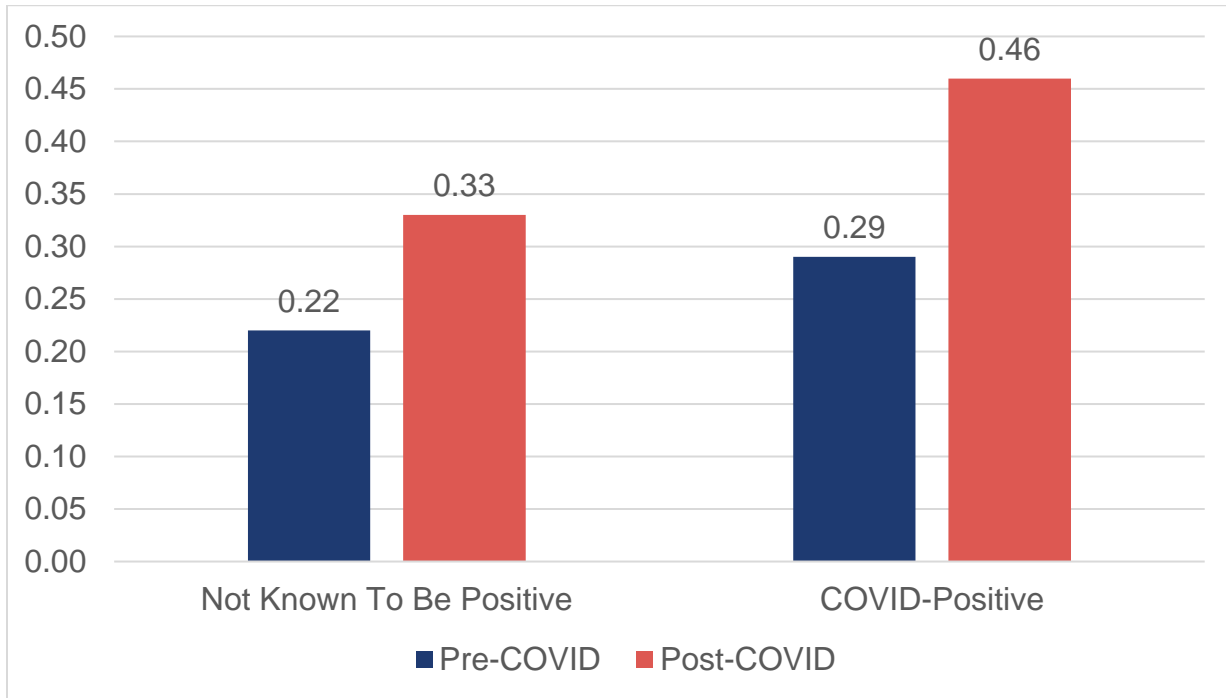


FIGURE 18: FATIGUE CLUSTER: DIFFERENCE IN PRE-COVID AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

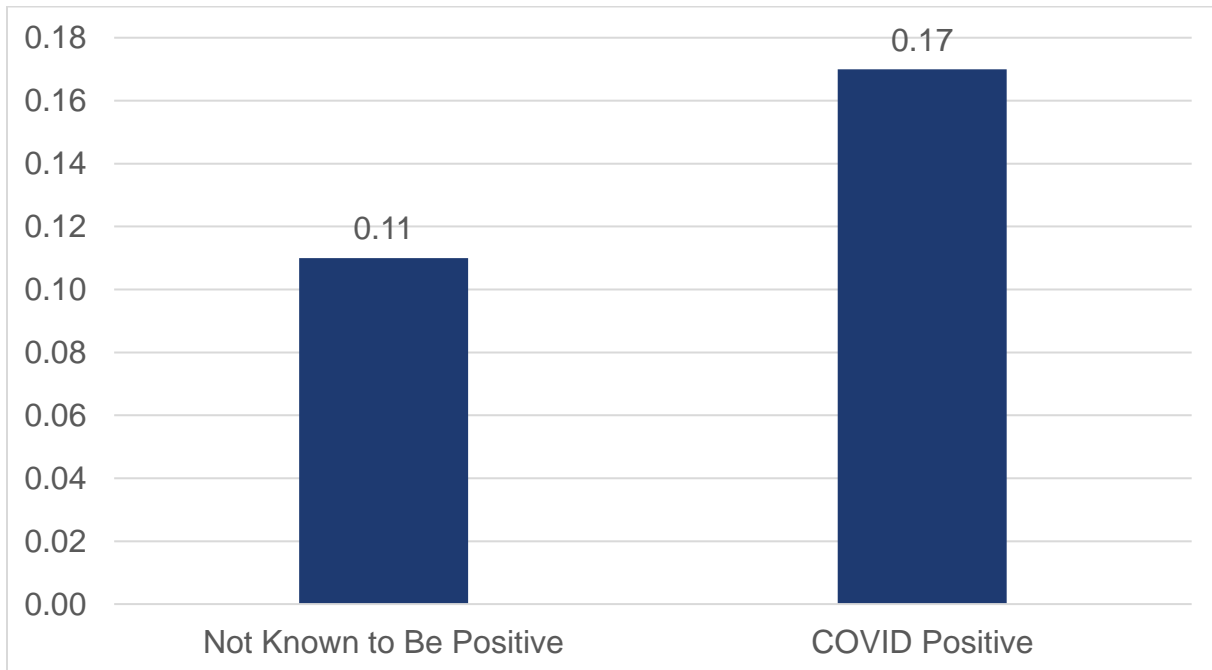


FIGURE 19 DEMOGRAPHICS OF FATIGUE CLUSTER AND RELATIVE PERCENTAGE DIFFERENCE IN PRE- AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH FOR THOSE KNOWN TO BE POSITIVE VERSUS THOSE NOT KNOWN TO BE POSITIVE

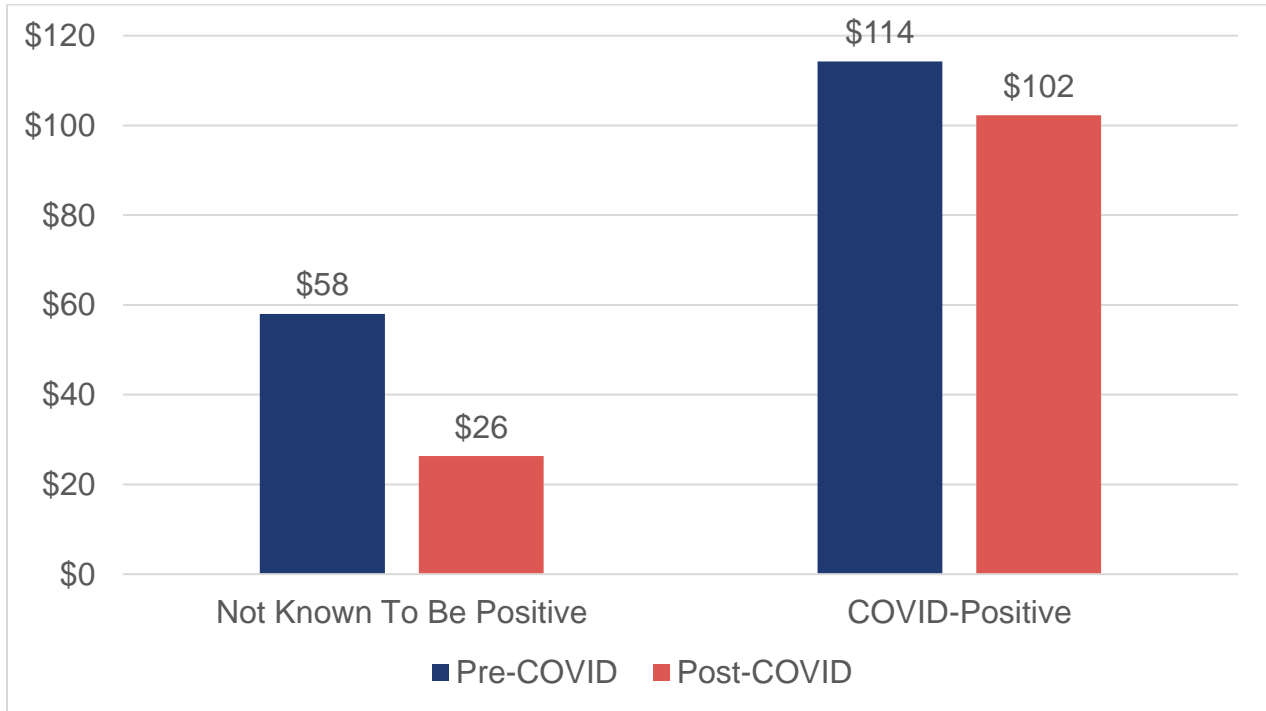
Variable	Not Known To Be COVID-Positive			COVID-Positive			Relative Percentage Difference
	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	
Sex							
Female (n=57,637)	0.20	0.30	0.10	0.26	0.41	0.15	50%
Male (n=28,887)	0.26	0.41	0.15	0.36	0.56	0.20	33%
Age							
19-44 (n= 28,048)	0.20	0.29	0.09	0.20	0.28	0.08	-11%
45-64 (n= 36,554)	0.21	0.31	0.10	0.26	0.40	0.14	40%
65+ (n= 21,922)	0.26	0.41	0.15	0.48	0.77	0.29	93%
Race & Ethnicity							
Asian (n=518)	0.20	0.22	0.02	0.22	0.18	-0.04	-300%
Non-Hispanic Black (n=10,909)	0.21	0.32	0.11	0.25	0.37	0.12	9%
Hispanic (n=561)	0.18	0.27	0.09	0.19	0.26	0.07	-22%
Native American (n=539)	0.19	0.26	0.07	0.16	0.39	0.23	229%
Other (n=994)	0.18	0.27	0.09	0.25	0.72	0.47	422%
Pacific Islander (n=73)	0.20	0.27	0.07	0.25	0.13	-0.12	-271%
Unknown (n=35,284)	0.24	0.35	0.11	0.26	0.45	0.19	73%
Non-Hispanic White (n=37,646)	0.21	0.32	0.11	0.31	0.49	0.18	64%
Rurality							
Small Rural (n=24,499)	0.21	0.30	0.09	0.27	0.45	0.18	100%
Large Rural (n=22,519)	0.22	0.32	0.10	0.26	0.44	0.18	80%
Small Urban (n=28,702)	0.24	0.36	0.12	0.32	0.49	0.17	42%



Large Urban (n=10,320)	0.23	0.34	0.11	0.30	0.40	0.10	-9%
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Note: 484 records were missing data to assign rurality.

FIGURE 20: FATIGUE CLUSTER: AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS IN THE PRE-COVID AND POST-COVID ERAS



INDIVIDUALS WITHOUT EVIDENCE OF A FATIGUE CLUSTER CONDITION IN THE PRE-COVID PERIOD

FIGURE 21: FATIGUE CLUSTER: AVERAGE POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

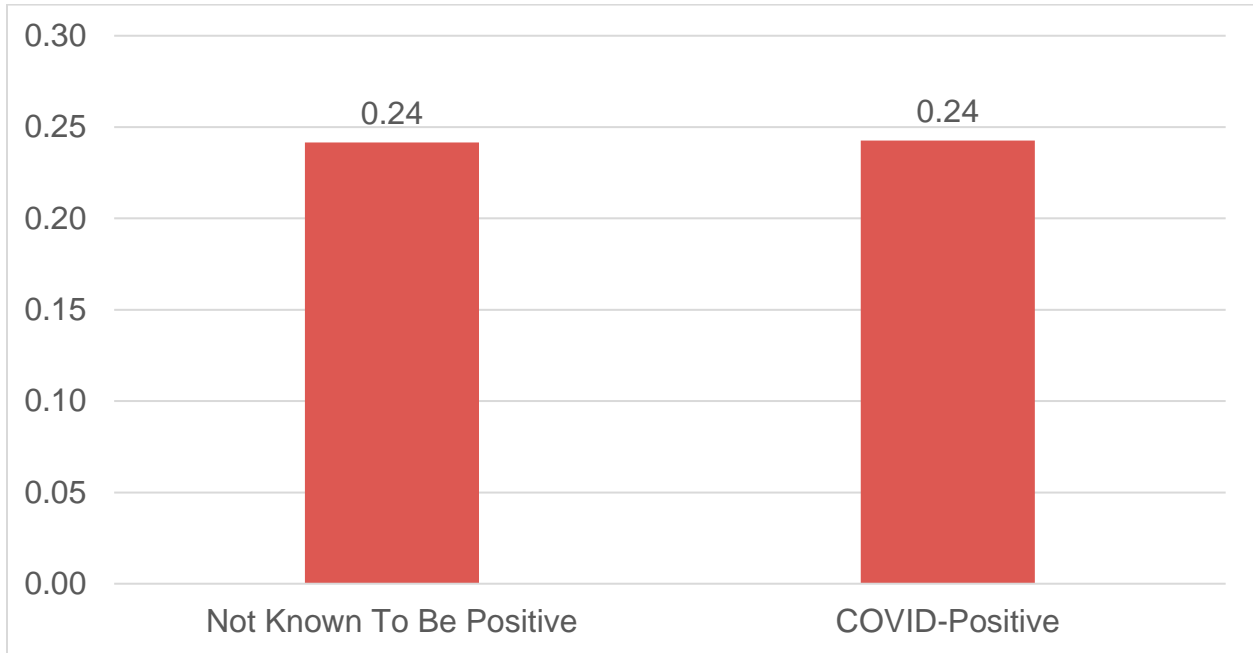


FIGURE 22: FATIGUE CLUSTER: POST-COVID AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS

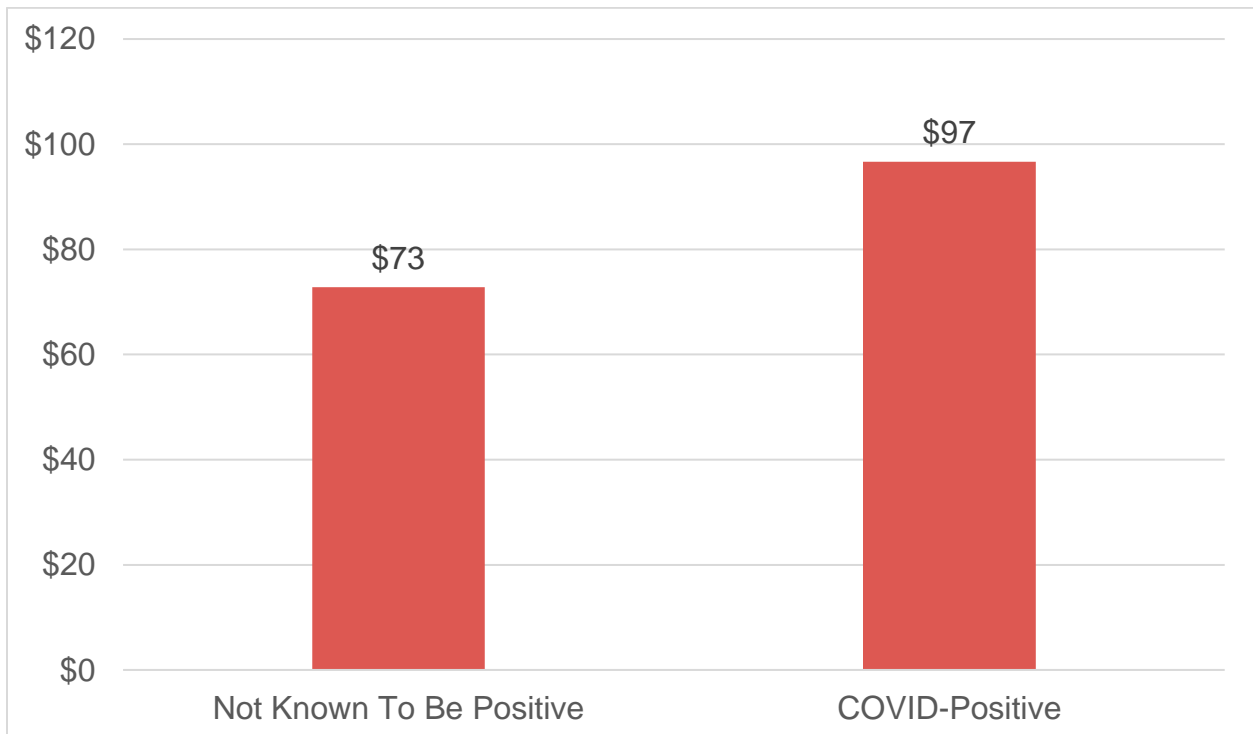


FIGURE 23: FATIGUE CLUSTER: POST-COVID-ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH VISITS AMONG COVID-POSITIVES BY COVID-19 HOSPITALIZATION STATUS

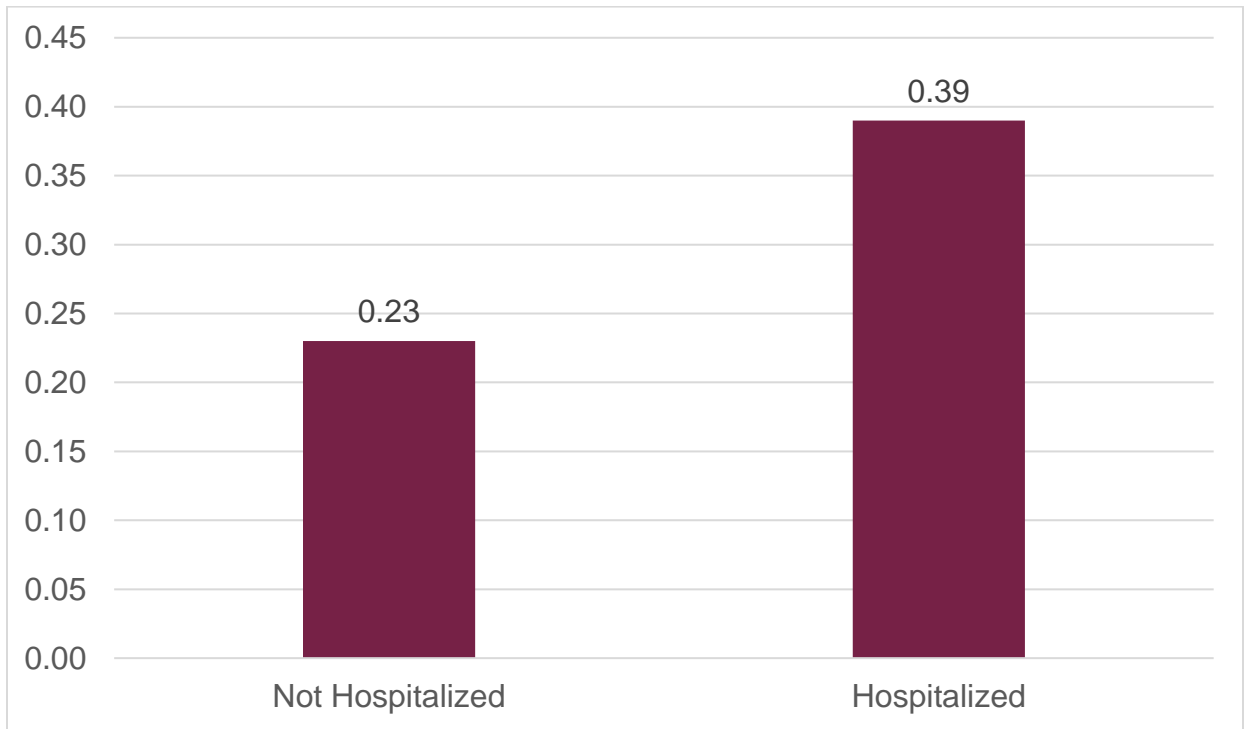
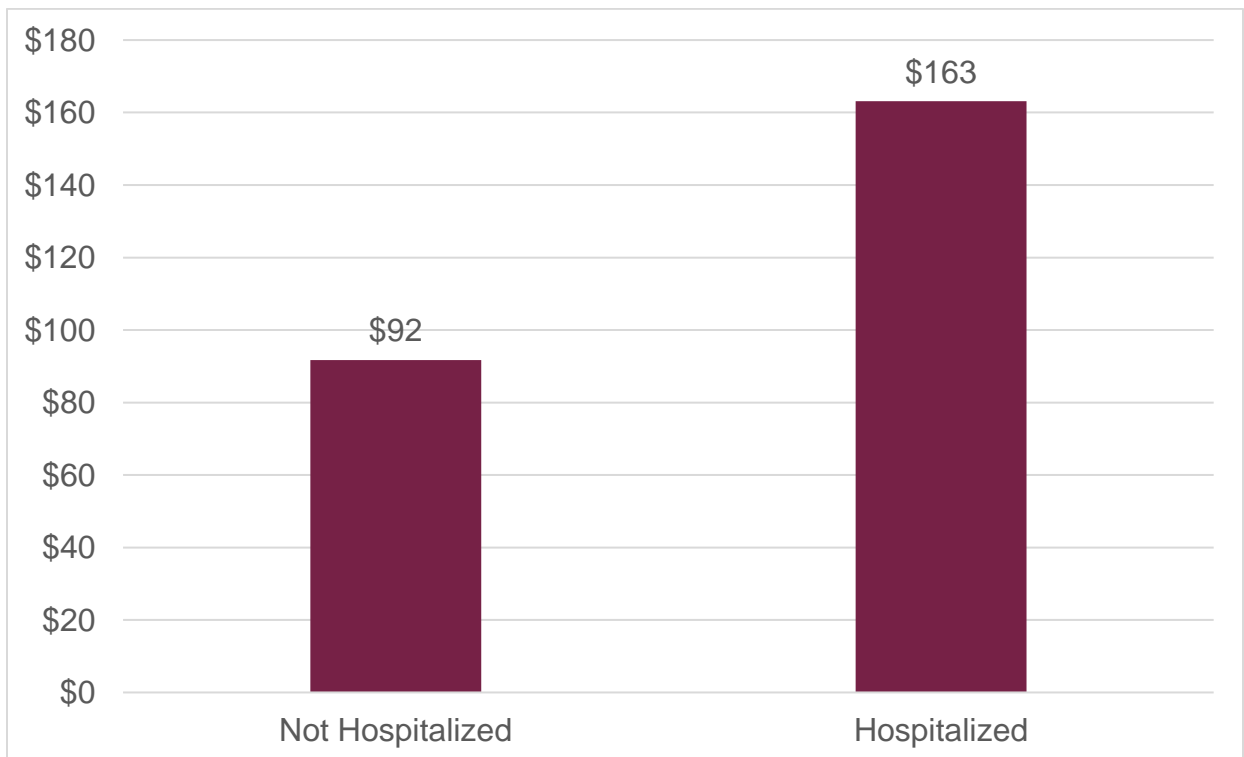


FIGURE 24: FATIGUE CLAIMS: POST-COVID-ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH COSTS AMONG COVID-POSITIVES BY COVID-19 HOSPITALIZATION STATUS



RESPIRATORY CONDITION CLUSTER

FIGURE 25: RESPIRATORY CLUSTER: PRE-COVID AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

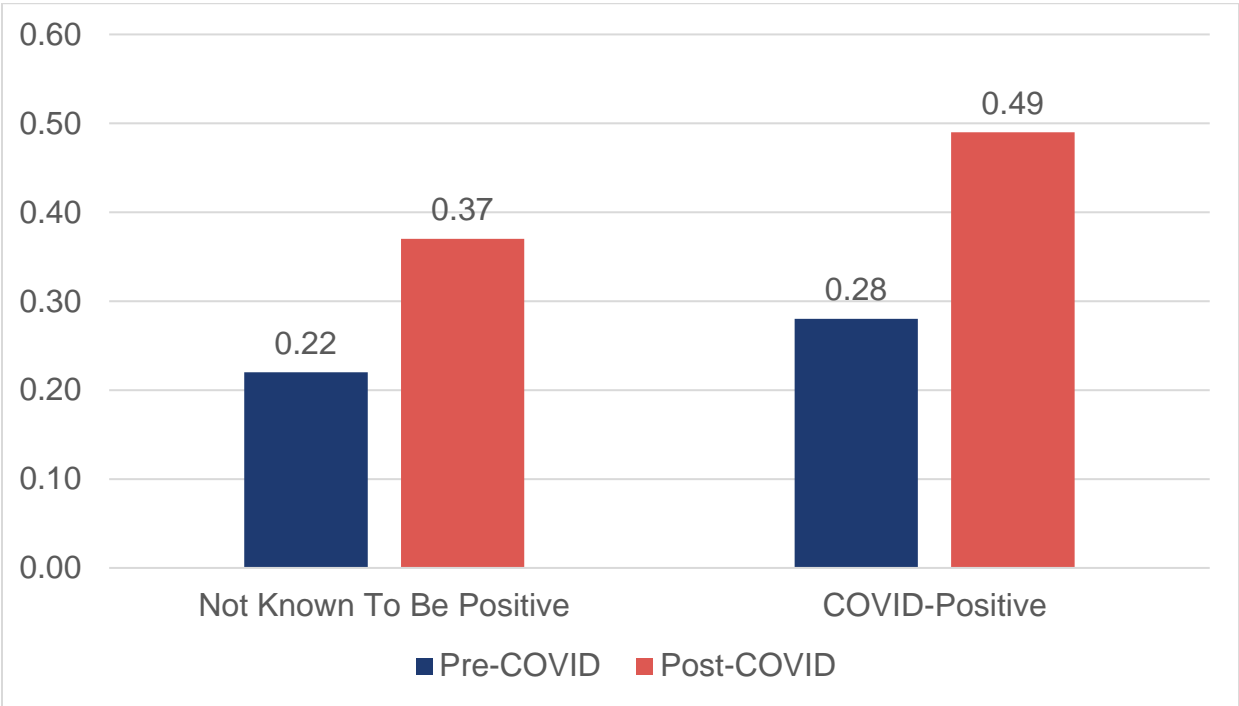


FIGURE 26: RESPIRATORY CLUSTER: DIFFERENCE IN PRE-COVID AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

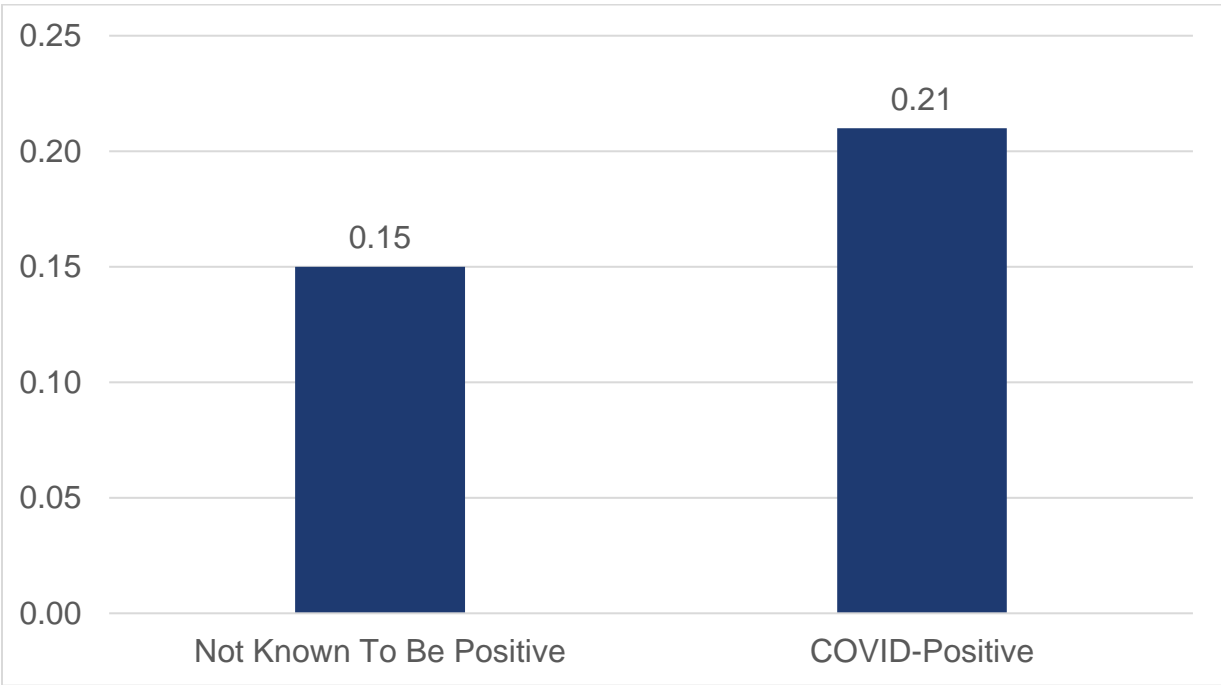


FIGURE 27: DEMOGRAPHICS OF RESPIRATORY CLUSTER AND RELATIVE PERCENTAGE DIFFERENCE IN PRE- AND POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH FOR THOSE KNOWN TO BE POSITIVE VERSUS THOSE NOT KNOWN TO BE POSITIVE

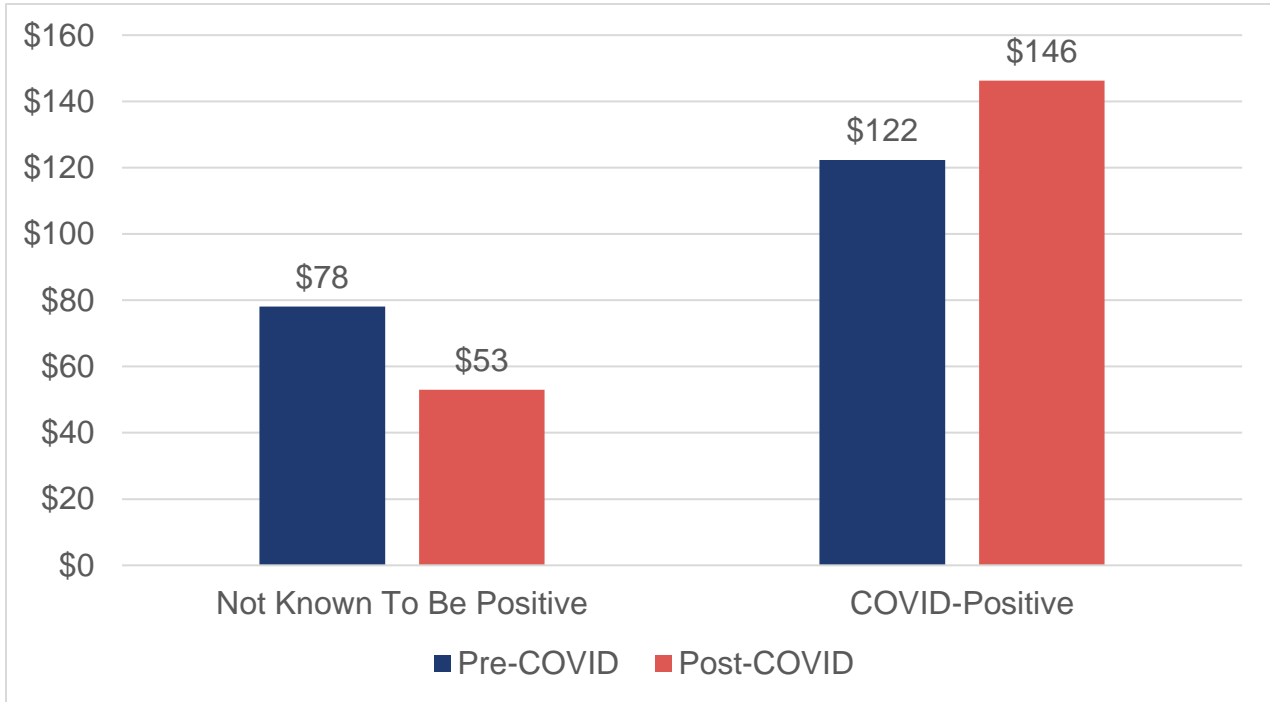
Variable	Not Known To Be COVID-Positive			COVID-Positive			Relative Percentage Difference
	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	Pre-COVID-Era Cluster-Related Visits PMPM	Post-COVID-Era Cluster-Related Visits PMPM	Difference	
Sex							
Female (n=77,836)	0.22	0.36	0.14	0.28	0.48	0.20	43%
Male (n=43,077)	0.22	0.38	0.16	0.28	0.51	0.23	44%
Age							
19-44 (n=38,802)	0.17	0.25	0.08	0.18	0.25	0.07	-13%
45-64 (n=51,811)	0.22	0.37	0.15	0.26	0.46	0.20	33%
65+ (n=30,300)	0.27	0.46	0.19	0.47	0.83	0.36	89%
Race & Ethnicity							
Hispanic (n=695)	0.14	0.31	0.17	0.19	0.35	0.16	-6%
Other (n=1,360)	0.19	0.30	0.11	0.27	0.38	0.11	0%
Non-Hispanic Black (n=18,493)	0.24	0.38	0.14	0.27	0.45	0.18	29%
Unknown (n=46,052)	0.19	0.30	0.11	0.19	0.34	0.15	36%
Non-Hispanic White (n=52,703)	0.25	0.41	0.16	0.30	0.53	0.23	44%
Asian (n=763)	0.21	0.30	0.09	0.18	0.34	0.16	78%
Native American (n=735)	0.23	0.33	0.10	0.25	0.48	0.23	130%
Pacific Islander (n=112)	0.38	0.33	-0.05	0.14	0.25	0.11	320%
Rurality							
Small Rural (n=33,125)	0.22	0.36	0.14	0.27	0.46	0.19	36%
Large Rural (n=31,607)	0.23	0.37	0.14	0.28	0.47	0.19	36%
Small Urban (n=39,865)	0.22	0.37	0.15	0.28	0.51	0.23	53%



Large Urban (n=15,690)	0.22	0.37	0.15	0.30	0.56	0.26	73%
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Note: 626 records were missing data to assign rurality.

FIGURE 28: RESPIRATORY CLUSTER: AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS IN THE PRE-COVID AND POST-COVID ERAS



INDIVIDUALS WITHOUT EVIDENCE OF A RESPIRATORY CLUSTER CONDITION IN THE PRE-COVID PERIOD

FIGURE 29: RESPIRATORY CLUSTER: AVERAGE POST-COVID-ERA CLUSTER-RELATED VISITS PER MEMBER PER MONTH

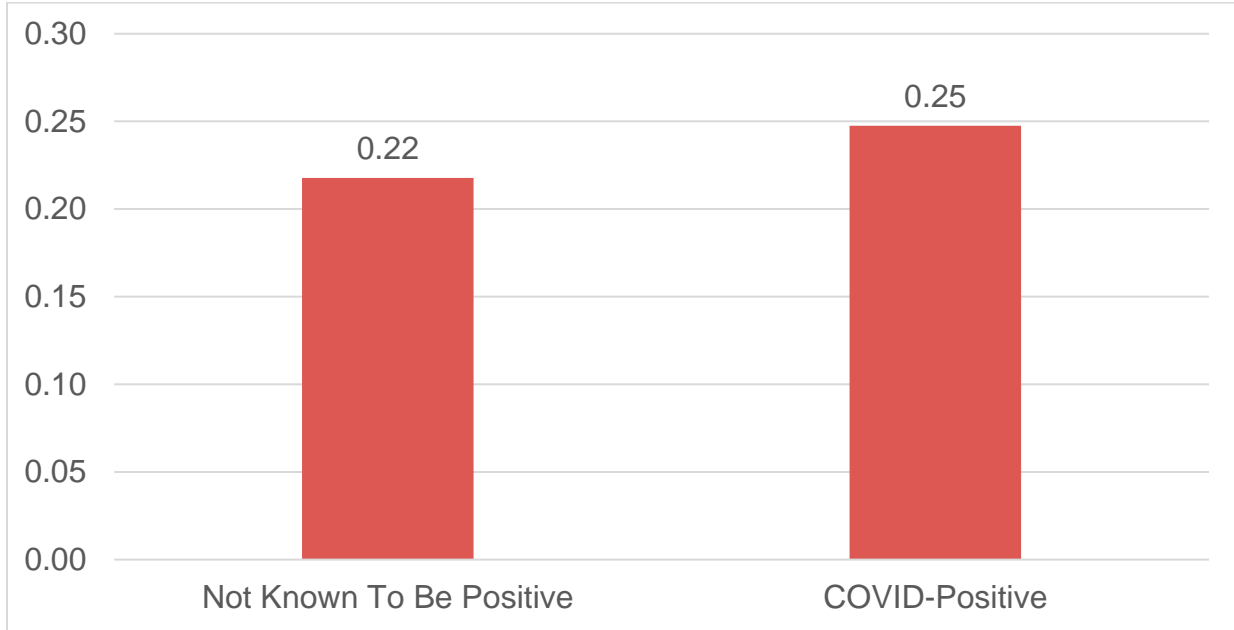


FIGURE 30: RESPIRATORY CLUSTER: POST-COVID AVERAGE PER MEMBER PER MONTH COSTS FOR CLUSTER-RELATED CLAIMS



FIGURE 31: RESPIRATORY CLUSTER: POST-COVID-ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH VISITS AMONG COVID POSITIVES BY COVID-19 HOSPITALIZATION STATUS

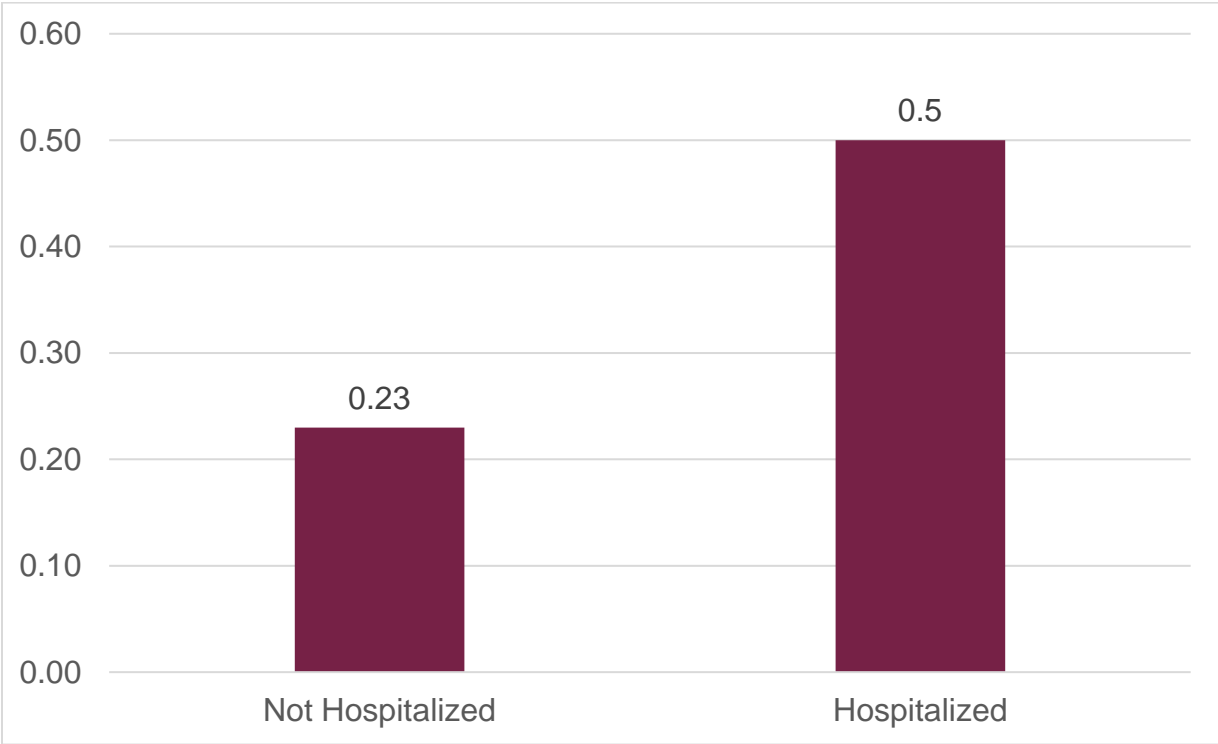
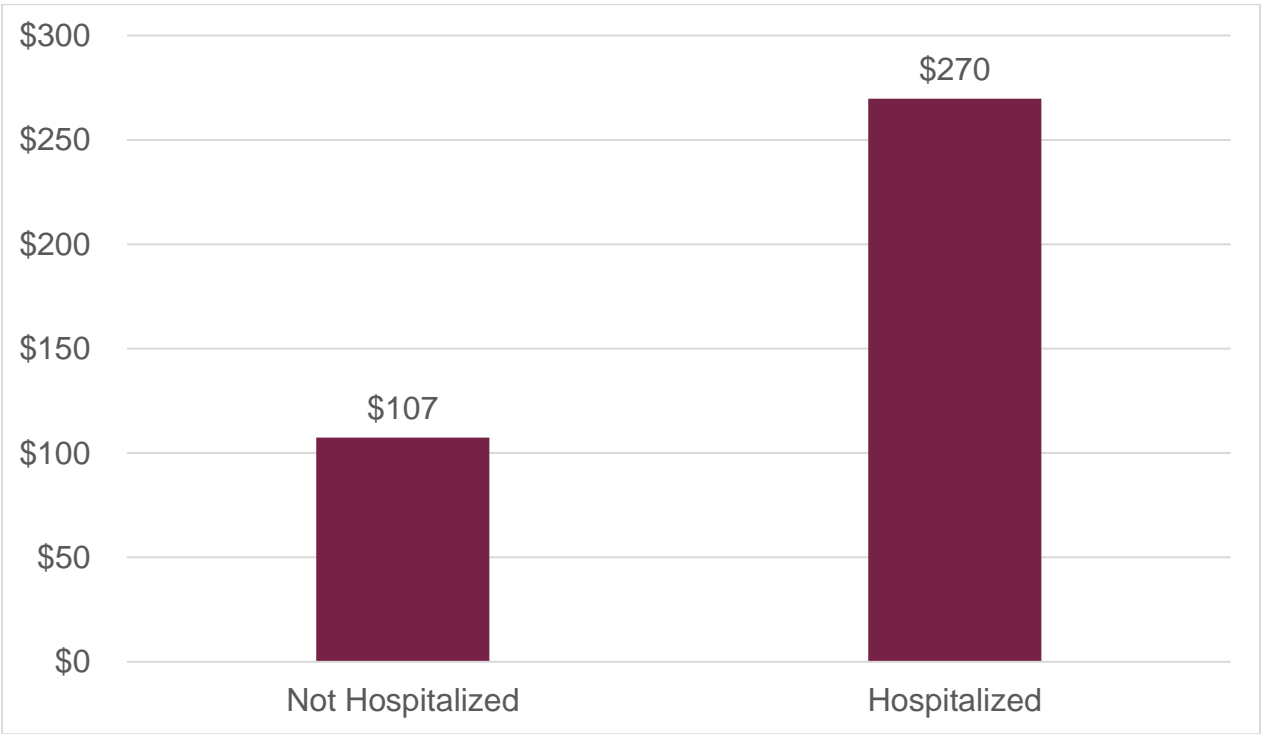


FIGURE 32: RESPIRATORY CLUSTER: POST-COVID-ERA CLUSTER-RELATED AVERAGE PER MEMBER PER MONTH COSTS AMONG COVID-POSITIVES BY COVID-19 HOSPITALIZATION STATUS



LONG COVID CONDITION CLUSTER

FIGURE 33: DEMOGRAPHIC PROFILE OF LONG COVID CONDITION CLUSTER

Variable	Number of Individuals in Cluster	Percentage of Total Cluster
Sex		
Female	931	69.7%
Male	404	30.3%
Age		
19-44	432	32.4%
45-64	674	50.5%
65+	229	17.2%
Race & Ethnicity		
Asian	4	0.3%
Non-Hispanic Black	227	17%
Hispanic	39	2.9%
Native American	8	0.6%
Other	20	1.5%
Pacific Islander	2	0.1%
Unknown	117	8.8%
Non-Hispanic White	918	68.8%
Rurality		
Small Rural	373	27.9%
Large Rural	370	27.7%
Small Urban	472	35.4%
Large Urban	109	8.2%

Note: 11 records were missing data to assign rurality.



FIGURE 34: LONG COVID CONDITION CLUSTER-RELATED VISITS PER MEMBER PER MONTH, HOSPITALIZED VS. NOT HOSPITALIZED

