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Table 3. Comparison of participants testing positive or negative for antibodies against SARS-CoV-2 by location and demographics in Denver, Colorado, May-July 2020. Four participants residing in shelters and one participant residing in an encampment had equivocal antibody results; these were excluded from the analysis.

	SARS-CoV-2 Antibody Positive (N = 55)	SARS-CoV-2 Antibody Negative (N = 274)	p-value
Age (Median, IQR)	54, 47-59	43, 34-54	<0.0001†
Type			
Shelter (n, %)	44, 24%	141, 76%	0.0002*
Encampment (n, %)	11, 8%	133, 92%	
Gender			
Women (n, %)	7, 10%	66, 90%	0.13*
Men (n, %)	44, 18%	201, 82%	
Race/Ethnicity			
White, non-Hispanic (n, %)	15, 11%	121, 89%	
Black, non-Hispanic (n, %)	13, 22%	45, 78%	
American Indian/Alaska Native, non-Hispanic (n, %)	3, 14%	18, 86%	0.17**
Hispanic (n, %)	16, 17%	58, 78%	
Other (n, %)**	4, 21%	19, 78%	

* Calculated using Chi-squared Test
 ** Calculated using Fisher Exact Test as expected cell count <5
 † Calculated using Mann Whitney U test
 *** Includes Asian, Hawaiian/Other Pacific Islander, persons who identified as "Other", and persons who identified as non-Hispanic and did not respond when asked to self-identify race.

Conclusion. A greater percentage of PEH tested positive for both SARS-CoV-2 RNA and antibodies at shelters than encampments, suggesting that continued assessment of mitigation strategies in shelters should be a priority.

Disclosures. All Authors: No reported disclosures

LB-13. Economic and workload impact of COVID-19 pandemic on physicians in the United States: results of a national survey

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Background. The United States (US) healthcare system has experienced enormous economic impact due to the COVID-19 pandemic, driven by both loss of revenue related to shutdowns and increased strain on resources. These factors have impacted the workload and finances of physicians.

Methods. A 31-item anonymous survey evaluating the psychological impact of the COVID-19 pandemic on physicians was developed at the University of Alabama at Birmingham using QualtricsSM software and included questions on adverse economic impact (defined as selecting job loss, furlough or reduced income as a stressor), workload, and compensation. It was distributed via physician professional and social networks including email, Facebook groups, and #MedicalTwitter May 14-July 31, 2020.

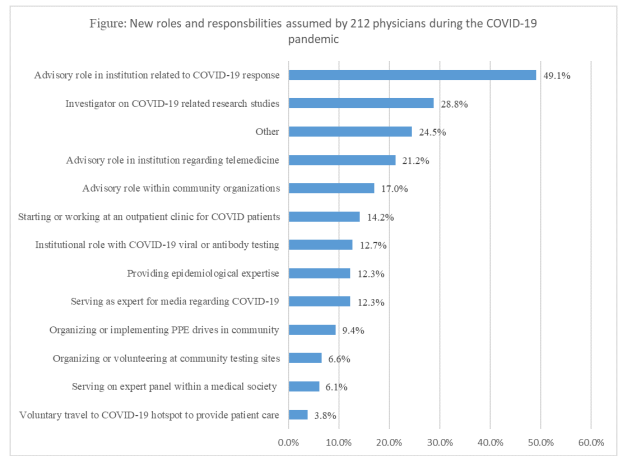
Results. Among 597 respondents, 295 (49%) reported adverse economic impact, with the highest proportions among emergency medicine (71%), anesthesiologists (63%), and surgeons (60%) and lowest among infectious diseases (ID) (25%). In multivariable analysis (Table), physicians practicing in the Northeastern US saw the lowest economic impact versus the South (OR 3.44, 95% CI: 2.03-5.84), Midwest (2.62, 1.36-5.05) or West (1.98, 1.06-3.71). Physicians practicing in federal or academic settings experienced less economic impact than those in community settings (0.09, 0.03-0.30 and 0.61, 0.41-0.93 respectively). Increased work hours were identified by 185 (31%) of respondents as a stressor, with 169 (92%) reporting additional hours were partially or completely uncompensated. Among 584 respondents, 212 (36%) had new roles and responsibilities (Figure), with the highest proportion among ID physicians (75%).

Table 1: Characteristics and factors associated with reporting adverse economic impact of the COVID-19 pandemic among 597 physicians in the United States

	Overall population (N=597)	Economic impact a=205 (49%)	No economic impact a=392 (52%)	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Gender^a				Ref	Ref
Male	131 (21.9%)	75 (47.3%)	56 (52.8%)	Ref	Ref
Female	466 (78.1%)	230 (47.2%)	246 (42.7%)	0.67 (0.45, 0.99)	0.71 (0.46-1.11)
Age, years				Ref	Ref
40 and over	311 (52.1%)	147 (47.3%)	164 (52.7%)	Ref	Ref
<40	205 (34.3%)	104 (50.7%)	101 (49.3%)	1.15 (0.81, 1.63)	1.15 (0.79-1.68)
Unspecified	81 (13.6%)	44 (54.3%)	37 (45.7%)	1.33 (0.81, 2.17)	1.39 (0.82-2.36)
Race/ethnicity				Ref	Ref
Non-Hispanic White	428 (71.7%)	213 (49.8%)	215 (50.2%)	Ref	Ref
Black	50 (5.0%)	20 (66.7%)	10 (33.3%)	2.02 (0.92, 4.41)	1.36 (0.77-4.03)
Hispanic/Latino	38 (6.4%)	15 (39.5%)	23 (60.5%)	0.66 (0.33, 1.30)	0.66 (0.32-1.37)
Asian	89 (14.9%)	42 (47.2%)	47 (52.8%)	0.90 (0.57, 1.42)	0.93 (0.57-1.52)
Other/unspecified	12 (2.0%)	5 (41.7%)	7 (58.3%)	0.72 (0.23, 2.31)	0.77 (0.22-4.03)
US Region				Ref	Ref
North	96 (16.1%)	27 (28.1%)	69 (71.9%)	Ref	Ref
South	308 (51.6%)	178 (57.8%)	130 (42.2%)	3.50 (2.12, 5.76)	3.44 (2.03-5.84)
Midwest	82 (13.7%)	41 (50.0%)	41 (50.0%)	2.56 (1.37, 4.78)	2.62 (1.36-4.85)
West	111 (18.6%)	49 (44.1%)	62 (55.9%)	2.02 (1.13, 3.61)	1.98 (1.06-3.71)
Area type				Ref	Ref
Urban	323 (54.1%)	146 (45.2%)	177 (54.8%)	Ref	Ref
Suburban	231 (38.7%)	128 (55.4%)	103 (44.6%)	1.51 (1.07, 2.12)	1.18 (0.79-1.77)
Rural	43 (7.2%)	21 (48.8%)	22 (51.2%)	1.16 (0.61, 2.19)	0.94 (0.46-1.93)
Practice setting				Ref	Ref
Community	293 (49.1%)	169 (57.7%)	124 (42.3%)	Ref	Ref
Academic	264 (44.2%)	119 (45.1%)	145 (54.9%)	0.60 (0.43, 0.84)	0.61 (0.41-0.93)
Federal	23 (3.8%)	11 (47.8%)	12 (52.2%)	0.89 (0.05, 0.31)	0.89 (0.03-0.30)
Other/unspecified	13 (2.2%)	4 (30.8%)	9 (69.2%)	0.53 (0.10, 1.08)	0.53 (0.15-1.91)
Practice location^b				Ref	Ref
Outpatient	188 (31.5%)	100 (53.2%)	88 (46.8%)	Ref	Ref
Hospital	382 (64.0%)	184 (48.2%)	198 (51.8%)	0.82 (0.58, 1.16)	0.82 (0.55-1.22)
Other/unspecified	27 (4.5%)	11 (40.7%)	16 (59.3%)	0.61 (0.27, 1.37)	0.66 (0.28-1.82)
Direct contact with COVID patient(s) in last month				Ref	Ref
No	253 (42.4%)	118 (46.6%)	135 (53.4%)	Ref	Ref
Yes	344 (57.6%)	177 (51.2%)	167 (48.8%)	1.21 (0.88, 1.68)	1.25 (0.86-1.82)

^aOne non-binary participant excluded as number too low to analyze
^bParticipants working in both hospital and outpatient or other locations were categorized in Hospital practice setting.
 Analyses were performed using SAS v 9.4 (SAS Institute, Cary, NC).
 Abbreviations: CI, confidence interval; OR, odds ratio

Figure: New roles and responsibilities assumed by 212 physicians during the COVID-19 pandemic



Conclusion. The COVID-19 pandemic has increased physician workload, with approximately one-third of physicians taking on new responsibilities and a similar proportion reporting increased work hours. Much of this additional work is uncompensated due to the economic impact of the pandemic on the healthcare system. Simultaneously, many physicians across the US have suffered adverse economic consequences, especially in the South. ID physicians have experienced higher workload but less economic impact, related to increased need for their expertise and new roles and responsibilities.

Disclosures. Dustin Long, PhD, Nothing to disclose

LB-14. CovidIQ- a Text Message-Based Symptom Surveillance Tracker that Predicts New Areas of Increased Incidence of Covid-19 Disease

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Background. Testing for SARS-CoV-2 is limited, making it difficult to estimate the true prevalence of disease and control the spread of new cases. Therefore, finding other ways to diagnose new cases of Covid-19 early is essential for preventing further spread of SARS-CoV-2 to other people in the community and prevent further outbreaks from occurring.

Methods. CovidIQ is a confidential and secure text messaging platform that works by collecting participants' self-reported symptoms. Upon agreeing to participate, users are asked some basic demographic questions including gender, age range, ethnic background, and zip code. Participants are then queried via text message on a weekly or biweekly basis as to what symptoms they are experiencing: none, temperature >99.6F, cough, shortness of breath, headache, fatigue, loss of appetite, loss of sense of smell or taste, diarrhea, body ache, sore throat, and/or chills. The symptoms are further broken down into major and minor criteria, allowing presumptive cases to be identified with more accuracy. The major criteria include elevated body temperature, cough, and shortness of breath. If a participant has any 2 major criteria, 1 major or 2 minor, or 3 minor criteria, they are considered a presumptive positive case.

While CovidIQ cannot be used to diagnose individuals, the combined results from many individuals show real-time changes in rates of infection for entire counties. Not all people who develop Covid-19 will need hospitalization. They may remain out in the community unaware of the risk they pose to others. And, because the official count of confirmed cases is delayed by 2-4 weeks from the time of actual infection, CovidIQ can sound the alarm much earlier when rates of infection begin to spike. Advanced warning can help communities and individuals make informed decisions about how they should conduct themselves.

Results. CovidIQ identified the spike in COVID-19 cases in Jacksonville/Duval County, Florida a full two weeks before it was reported by the Florida Department of Health and Johns Hopkins University.

Prevalence of Suspected COVID-19 Cases Through the Use of the CovidIQ Platform in Relation to Dates of Officially Reported Cases, Duval County, FL