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.

| Location          | Antibody Positive     | Antibody Negative     | P-value |
|-------------------|-----------------------|-----------------------|---------|
| Overall            | 40 (31.3%)            | 92 (68.7%)            | Ref     |
| Economic Status    |                        |                       |         |
| Low                | 18 (30%)              | 44 (70%)              | Ref     |
| Middle             | 10 (36.4%)            | 19 (63.6%)            | 0.031   |
| Upper              | 12 (36.4%)            | 20 (63.6%)            | 0.031   |
| Race/Ethnicity     |                        |                       |         |
| White              | 37 (32.6%)            | 84 (67.4%)            | Ref     |
| Black              | 3 (21.4%)             | 10 (78.6%)            | 0.002   |
| Hispanic           | 4 (16.7%)             | 19 (83.3%)            | 0.031   |
| Other               | 6 (50%)               | 7 (50%)               | Ref     |
| Age (Median, IQR)  | 54, 47-59             | 43, 38-54             | <0.0001 |

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

Dustin Long, PhD1; Dustin Long, PhD1; Wesli Turner, MSc2; Crystal Chapman Lambert, PhD, CRNP3; Thomas Creger, PhD3; Michael J. Mugavero, MD, MPH3; Greer A. Burkholder, MD, MSPH3; Oasis Labs, San Francisco, California; 1University of Alabama at Birmingham, Birmingham, Alabama; 3University of Alabama at Birmingham, Birmingham, Alabama Session: LB2. Late Breaking COVID-19 Abstracts Saturday, October 24, 2020: 5:05 PM

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 Qualtrics 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%) (Table). Surveys were completed in highest proportions among infectious diseases (ID) (25%). In multivariable analysis (Table), physicians practicing in the Northeastern US saw the lowest impact (defined as selecting job loss, furlough or reduced income as a stressor), work load, and compensation. It was distributed via physician professional and social networks including email, Facebook groups, and MedicalTwitter May 14-July 31, 2020.

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 as a result of 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

Mohammed Reza, MD1; Eran Magen, PhD2; Naheed Vora, MBA3; Katherineographers, ARNP4; Debbie Moll, PhD5; Elaine Warren, MCS6; Anil Suryaprasad, MD7; Laura Armas-Kolostrous, MD8; Alice Cheung, PhD9; 1CAN Community Health, Jacksonville, Florida; 2N/A, Hartford, Connecticut; 3Oasis Labs, San Francisco, California; 4Hamilton County Health Department, Cincinnati, Ohio; 5Survivor Plan, Elmhurst, Illinois; 6Queen's University, Belfast, Louth, Ireland Session: LB2. Late Breaking COVID-19 Abstracts Saturday, October 24, 2020: 2:05 PM

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 >99.6°F, 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 of these symptoms, they should conduct themselves. CovidIQ identified the spike in COVID-19 cases in Jacksonville/Duval County a full two weeks before it was reported by the Florida Department of Health and Johns Hopkins University.

Session: LB2. Late Breaking COVID-19 Abstracts Saturday, October 24, 2020: 2:05 PM

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 >99.6°F, 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 of these symptoms, they should conduct themselves. CovidIQ identified the spike in COVID-19 cases in Jacksonville/Duval County a full two weeks before it was reported by the Florida Department of Health and Johns Hopkins University.

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 as a result of 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

Mohammed Reza, MD1; Eran Magen, PhD2; Naheed Vora, MBA3; Katherineographers, ARNP4; Debbie Moll, PhD5; Elaine Warren, MCS6; Anil Suryaprasad, MD7; Laura Armas-Kolostrous, MD8; Alice Cheung, PhD9; 1CAN Community Health, Jacksonville, Florida; 2N/A, Hartford, Connecticut; 3Oasis Labs, San Francisco, California; 4Hamilton County Health Department, Cincinnati, Ohio; 5Survivor Plan, Elmhurst, Illinois; 6Queen’s University, Belfast, Louth, Ireland Session: LB2. Late Breaking COVID-19 Abstracts Saturday, October 24, 2020: 2:05 PM

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 >99.6°F, 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 of these symptoms, they should conduct themselves. CovidIQ identified the spike in COVID-19 cases in Jacksonville/Duval County a full two weeks before it was reported by the Florida Department of Health and Johns Hopkins University.

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 as a result of 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
Conclusion. CovidIQ is a novel tool developed to augment the public health response to this ongoing crisis by informing the public sector of potential new hot spots before areas experience a surge as compared to the current reporting structure.

Disclosures. All Authors: No reported disclosures

**LB-15. A Trans-Governmental Collaborative Effort to Independently Evaluate SARS-CoV-2 Serology Assays Using Well-Characterized Sample Panels**

Ribhi Shawar, Ph.D.1; Brendan O’Leary, B.S.1; Troy Kemp, Ph.D.1; James Cherry, Ph.D.1, S. Michele Owen, Ph.D.1; Pamela Gallagher, Ph.D.1; Natalie Thornburg, Ph.D.1, Marina Kondratovitch, Ph.D.1; Subbian Sathishkumar Panayampalli, Ph.D.1; Amy Schuh, Ph.D.1; Sandra Lester, Ph.D.1; Cristina Cassetti, Ph.D.1; Cristina Cassetti, PhD.1; Douglas Lowey, M.D.1; Steve R. Gitterman, MD, Ph.D.2; Food and Drug Administration, Silver Spring, Maryland; 3Centers for Disease Control and Prevention, Atlanta, Georgia; 4Synergy America, Inc., Duluth, Georgia; 5Division of Microbiology and Infectious Diseases, NIAID, NIH

**Session:** LB2. Late Breaking COVID-19 Abstracts Saturday, October 24, 2020: 2:15 PM

**Background.** The emergence of the novel coronavirus, SARS-CoV-2, created a crucial need for accurate tests for diagnosis, assessment of prior infection, and understanding its natural history. Serology assays play an important role in the assessment of anti-viral immune responses and previous infections. Evaluation of serology assays with well-characterized serum and/or plasma samples is critical to determine assay performance. CDC, FDA and NCTs Frederick National Laboratory for Cancer Research (NCI-FNLCR) have established a collaborative network to independently evaluate commercial antibody tests prior to their authorization.

**Methods.** Positive (n=30) serum samples with a range of anti-SARS-CoV-2 antibody titers (Table) and negative (n=80) serum and/or plasma samples were selected to establish performance evaluation panels (PEVs). Three PEVs with similar overall antibody titer distribution have been created. Negative samples were collected prior to 2020, before the SARS-CoV-2 pandemic. Positive samples were from patients previously confirmed to have SARS-CoV-2 using a nucleic acid amplification test. Each sample was characterized at CDC and NCI-FNLCR for presence/absence of SARS-CoV-2 IgM and IgG antibodies using a SARS-CoV-2 spike enzyme linked immunosorbent assay (ELISA). NCI-FNLCR also performed a SARS-CoV-2 spike Receptor Binding Domain (RBD) IgG ELISA. Positive samples were assessed at multiple dilutions. Manufacturers submitted their serology assays for evaluation by this program. The sensitivity of each test was assessed for each antibody class (IgG and IgM) and in a combined manner, where a positive result for either antibody was considered as a positive result. For combined specificity, a negative result meant a sample was negative for both antibodies (IgG and IgM).

**Number of positive samples with anti-SARS-CoV-2 spike antibodies for each panel (n=30)**

| Titer | IgG Panel 1 | IgG Panel 2 | IgG Panel 3 | IgG Panel 1 | IgG Panel 2 | IgG Panel 3 | IgM Panel 1 | IgM Panel 2 | IgM Panel 3 |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1:100 | 1           | 0           | 0           | 13          | 12          | 11          | 0           | 1           | 1           |
| 1:400 | 7           | 6           | 7           | 11          | 11          | 12          | 6           | 6           | 6           |
| 1:1600| 12          | 12          | 11          | 6           | 6           | 6           | 0           | 1           | 1           |
| 1:6400| 10          | 12          | 12          | 0           | 1           | 1           | 1           | 1           | 1           |

**Results.** To date, 53 serology assays have been evaluated. Sensitivity ranged from 30.0% to 100% for IgG, from 10.0% to 100% for IgM, and the combined specificity ranged from 57.5% to 100%. For 2 assays that measure total IgG, sensitivity was 96.7% and 100%.

**Conclusion.** This program completed over 50 performance evaluations with well-characterized PEVs. Results have been used to inform FDA regulatory decisions and are publicly available on FDA’s website.

**Disclosures.** Cristina Cassetti, PhD. Nothing to disclose

**LB-16. Association Between Universal Face Shield in a Quarantined Care Center and Reduction of SARS-COV2 Infections Among Healthcare Personnel and Hospitalized Patients**

Yagesh Hemmige, MD.1; Becky Winterer, RN.1; Todd Lasco, PhD.1; Bradley Lembcke, MD MBA.1; Montefiore Medical Center, New York City, New York; 2Baylor St Luke’s Medical Center, Houston, Texas; 3Baylor St. Luke’s Medical Center, The Woodlands, Texas

**Session:** LB2. Late Breaking COVID-19 Abstracts Saturday, October 24, 2020: 2:25 PM

**Background.** SARS-CoV2 transmission to healthcare personnel (HCP) and hospitalized patients is a significant challenge. Our hospital is a quaternary healthcare system with more than 500 beds and 8,000 HCP. Between April 1 and April 17, 2020, we instituted several infection prevention strategies to limit transmission of SARS-COV2 including universal masking of HCP and patients, surveillance testing every two weeks for high-risk HCP and every week for cluster units, and surveillance testing for all patients on admission and prior to invasive procedures. On July 6, 2020, we implemented universal face shield for all healthcare personnel upon entry to facility. The aim of this study is to assess the impact of face shield policy on SARS-COV2 infection among HCP and hospitalized patients.

**Figure 1 - Interrupted time series**

**Methods.** The preintervention period (April 17, 2020-July 5, 2020) included implementation of universal face masks and surveillance testing of HCP and patients. The intervention period (July 6, 2020-July 26, 2020) included the addition of face shield to all HCP (for patient encounters and staff-to-staff encounters). We used interrupted time series analysis with segmented regression to examine the effect of our intervention on the difference in proportion of HCP positive for SARS-COV2 (using logistic regression) and HAI (using Poisson regression). We defined significance as p values < 0.05.

**Results.** Of 4731 HCP tested, 192 tested positive for SARS-COV2 (4.1%). In the intervention period, the weekly positivity rate among HCP increased from 0% to 12.9%. During the intervention period, the weekly positivity rate among HCP decreased to 2.3%, with segmented regression showing a change in predicted proportion positive in week 13 (18.0% to 3.7%, p< 0.001) and change in the post-intervention slope on the log odds scale (p< 0.001). A total of 14 HAI cases were identified. In the preintervention period, HAI cases increased from 0 to 5. During the intervention period, HAI cases decreased to 0. There was a change between pre-intervention and post-intervention slope on the log scale was significant (p< 0.01).

**Conclusion.** Our study showed that the universal use of face shield was associated with significant reduction in SARS-COV2 infection among HCP and hospitalized patients.

**Disclosures.** All Authors: No reported disclosures

**LB-17. Efficacy of Hydroxychloroquine (HCQ) for Post-exposure Prophylaxis to Prevent Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection: A Blinded, Randomized, Controlled Trial**

Elizabeth R. Brown, ScD.1; Anna Bershteyn, PhD.2; Helen C. Stankiewicz Karita, MD, MS.3; Christine Johnston, MD, MPH.4; Lorna Thorpe, MPH, PhD.1; Angelica Kottkamp, MD.1; Kathleen Neuzil, MD, MPH.5; Miriam K. Laufer, MD.1; Meagan Deming, MD, PhD.1; Michael K. Paasche-Olows, MD.1; Patricia J. Kissing, PhD, MPH.1; Alfred Luk, MD.1; Kristopher M. Paolino, MD, MTM&H.1; Kristopher M. Landovitz, MD, MPH, ScD.2; Susan Morrison, MD, MPH.6; Torin J. Landoizit, MD, MSc.2; Lara Kidoguchi, MPH.1; Mark H. Wald, MD.1; Helen C. Stankiewicz, PhD.1; Meei-Li Huang, PhD.1; Keith Jerome, MD, PhD.1; Anna Wald, MD, MPH.1; Anna Wald, MD, MPH.1; Connie Celum, MD, MPH.1; Helen Y. Chu, MD, MPH.1; Jarel M. Baeten, MD, PhD.1; University of Washington, Seattle, Washington; 2Baylor St. Luke’s Medical Center, Houston, Texas; 3New York University Grossman School of Medicine, New York, New York; 4University of Maryland School of