Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

score = 84 for both periods). The linear regression coefficient of the plot for the entire period 1/1/2016 to 8/31/2018 was R squared = 0.0004 (p = 0.91).

Conclusion: Contrary to our hypothesis, there was no change in ED back pain patient satisfaction scores after legislation, despite a marked decrease in ED opiate prescriptions.

12 months before and 12 months after February 2017

Back pain					
Year and month of service	Visits	Avg Satisfaction Score	Avg Doc Score	# of Responses	
201602	3,330	85.3	85.6	60	1
201603	3,444	82.9	84.8	38	1
201604	3,489	82.3	80.0	53	1
201605	3,503	81.9	82.7	44	1
201606	3,475	85.1	82.7	46	1
201607	3,576	88.3	88.3	66	1
201608	3,533	82.7	82.0	44	1
201609	3,532	86.9	87.7	42	1
201610	3,621	84.3	83.8	66	1
201611	3,180	87.6	85.4	41	1
201612	3,465	84.1	83.2	57	1
201701	3,604	81.4	81.4	41	1
averages		84.4	84.0	49.8	12
201703	3,420	86.3	86.7	58	1
201704	3,610	79.8	78.4	45	1
201705	3,862	79.4	78.0	56	1
201706	3,721	84.6	85.5	46	1
201707	3,709	85.2	84.2	40	1
201708	3,820	91.1	92.1	40	1
201709	3,476	87.3	86.6	50	1
201710	3,730	88.5	88.3	54	1
201711	3,471	85.5	86.6	43	1
201712	3,256	82.8	80.7	47	1
201801	3,663	85.0	83.6	38	1
201802	3,184	81.4	78.1	44	1
averages		84.8	84.1	46.8	12

69 Four-year Reimbursement Trends to a Single Health System from Local Out-of-Network Health Plans

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Study Objectives: Network-based delivery of health care has been developed to provide high-quality, cost-efficient, coordinated care. With the increasing development of organized, network-based and value-based care, emphasis is given to delivering care at patient's in-network facilities. When care is obtained out-of-network (OON), reimbursement to the OON facility may vary. The purpose of this study was to determine the trends in reimbursement rates to our health system for OON patients admitted at our facilities.

Methods: This was a retrospective descriptive study performed between January 2013 and December 2017 at a tertiary care, referral University hospital. Included were: 1) patients identified in our electronic health record (EHR) who were admitted for >1 day at one of our two acute care University hospitals which were considered out-of-network (OON) facilities by the patients' primary health network, and 2) patients whose health system network was any one of three specific, non-governmental, large health care systems in our region. Excluded were patients who were not insured through one of these three health care networks. We identified the reimbursement rates from the OON health systems to our institution for the included patients' admission. We trended reimbursement rates to our institution from the OON health systems for those patients who were not repatriated to one of their networks' acute care hospitals and remained at our institution for the duration of their admission and for those re-patriated to their network's acute care hospital regardless of length of stay. Descriptive statistics are reported.

Results: A total of 6297 OON admitted patients were identified in our EHR. The distribution of these OON patients among the three local health systems was as follows: 56.6% network A, 33% network B and 10.4% network C. Of these OON patients, 5173 patients (82.2%) were not repatriated and remained at our institution for the duration of their hospitalization. 1124 patients (17.9%) were repatriated back to their in-network facilities. Overall, for those OON patients not repatriated, there was a decrease in reimbursement rates to our institution from 45.1% in 2013 to 40.7% in 2017 with a median annual decrease of 4.4%. Among those OON patients re-patriated, there was a decrease in reimbursement rates from 44.4% in 2013 to 33.2% in 2017 with a median annual decrease of 3.2%. Reimbursement to our institution for non-repatriated patients trended downward for all three health systems. Reimbursement for re-patriated patients trended downward for two of the health systems (A and C) and upward for the third (B).

Conclusion: Reimbursement to our institution as an OON provider to patients belonging to other local health system networks is decreasing. These reimbursement trends may reflect the increasing importance of organized, value-based care networks. This study was limited in that this was a single, tertiary care, referral health system's data and may not be generalizable to other health systems.

70 The Effect of Rapid COVID-19 Testing on Emergency Department Throughput

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Study Objectives: Emergency departments (ED) across the world continue to grapple with the COVID-19 pandemic. One growing concern is the ability to rapidly diagnose those infected with the SARS-CoV-2 virus. While rapid assays have proven beneficial in such contexts as strep pharyngitis and influenza, it is unclear whether the recent rapid COVID-19 assays will prove beneficial to ED flow. The purpose of this study is to assess the effect of a rapid COVID-19 assay on patient flow through two academic emergency department sites.

Methods: This was a retrospective, multi-facility study conducted between March 10, 2020 and May 9, 2020 at two university hospital EDs that are part of one health system. A rapid COVID-19 assay became available in our health system on April 10, 2020. Included were ED patients of all ages undergoing COVID-19 testing who were considered persons under investigation (PUI). PUIs tested between March 10, 2020 and April 9, 2020 via PCR testing served as the control group. Those tested between April 10, 2020 and May 9, 2020 via the rapid assay comprised the intervention group. Differences in length of stay (LOS) were analyzed between the two groups using T tests and multivariate regression.

Results: A total of 9,929 ED patient encounters occurred during the study period, and 3,137 PUIs underwent COVID-19 testing. Average age was 50 years. Fifty-six percent were male. 1,339 PUIs (42.7%) were tested with the PCR test during the control period. 1,798 PUIs (57.3%) were tested with the rapid assay during the intervention period. In the control group, 788 PUIs were discharged and 493 PUIs were admitted. In the intervention group, 512 PUIs were discharged and 1,129 PUIs were admitted. Mean length of stay (LOS) was 341 minutes and 489 minutes for PUI seen in the control period and in the intervention period, respectively (p<.001). When parsed by disposition, differences in mean LOS remained significant for those who were discharged (p<.001), but not for those who were admitted (p=0.35). After controlling for severity index, disposition, and demographic factors, testing with the rapid assay during the intervention period remained associated with an increased length of stay of approximately 95 minutes (95% CI 72-118, p<.001).

Conclusion: The use of a rapid COVID-19 assay did not improve patient throughput in our ED and was associated with a longer LOS, especially among those discharged from the ED. Additional testing is needed to determine the utility of the rapid COVID-19 test among an ED population.

71 COVID-19 Referral Patterns for Tent and Drive-Through Screening

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Study Objectives: In fewer than 6 months, the SARS-CoV-2 virus (COVID-19) has been responsible for over 100,000 American deaths. The creation of novel COVID-19 screening sites such as walk-up medical tents and drive-through testing sites may improve our ability to rapidly screen large numbers of people without overwhelming traditional medical sites such as clinics or hospitals. How these novel screening sites are used by patients, providers, and the community is still unknown. Our objective was to investigate why, and how patients were being referred for screening.

Methods: We evaluated the referral patterns for a single COVID-19 walk-up medical tent and a single drive-through testing site established one-block from an urban academic tertiary-care hospital between March 2020 and June 2020. Data was gathered as to why and how the patient was referred. Reasons for referral included being immunocompromised or having an immunocompromising comorbidity (such as diabetes), requirement by an employer, asymptomatic patients exposed within the last 7-14 days, age greater than 65, health care workers, and other. Data on how the patients were referred, included telehealth visits with real-time audio-visual, telephone calls, or in-person office visits was also gathered. Data was abstracted from standardized collection forms and checked for accuracy by two reviewers. Descriptive analytics were used to describe the cohort.

Results: Of the 767 patients who presented for screening, 39.5% were referred for being immunocompromised or having an immunocompromising comorbidity. Employer requirements constituted 30.8% of referrals. Asymptomatic patients with positive exposures in the last 7-14 days made up 13.4% of referrals. Age greater than 65 and health care workers constituted 11.6% and 9.8% of referrals respectively. The remaining 8.2% were referred for "other" reasons. When examining how the referrals were made, 58.7% came from tele-health visits with real-time audio-visual. Telephone visits constituted 35.8% of referrals, and in-person office visits made up the remaining 5.5%.

Conclusion: As expected, the vast majority of screening referrals came from patients who were immunocompromised or had immunocompromising comorbidities. Remarkably, 30.8% of referrals were made based on (non-health care) employer requirements. This may be explained by the prolonged stay-at-home orders governing the DMV area (DC, Maryland and Virginia). Many patients may have been essential workers, required by their jobs to undergo screening. This study could not confirm who the employers were, or if the screening requirements were scientific. Regardless, the role of employers in generating demand for screening services must be noted. When examining how referrals were made, 94.5% stemmed from real-time audio-visual telehealth appointments (58.7%) or telephone appointments (35.8%). It has been noted that telehealth has the potential to improve access and equity. The role of telehealth in a pandemic seems vital in delivering care directly to our most medically and socio-economically vulnerable. Furthermore, tele-health may be critical in expanding access to essential workers in a time of crisis.

72 Post Hoc Analysis of the RCT Comparing F(ab')$_2$to Fab Antivenom: Control of Venom-induced Tissue Injury in Copperhead Snakebite Patients

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Background: Fab antivenom (FabAV) halts progression of venom-induced tissue injury and improves recovery in copperhead snakebite. It is unknown if F(ab')$_2$ does as well. A prior study comparing F(ab')$_2$AV with FabAV included copperhead snakebite patients and made assessments of the initial and maintenance control of the envenomation syndrome. In copperhead snakebite, these assessments primarily evaluate the control of tissue injury. The objective of this study is to compare control of tissue injury in copperhead snakebite patients treated with F(ab')$_2$ versus Fab antivenom.

Methods: We performed a post hoc analysis of the copperhead envenomated patients in a prospective, multicenter, blinded, randomized, controlled trial (RCT) comparing F(ab')$_2$AV to FabAV approved by the Institutional Review Board at each site and registered at ClinicalTrials.gov, #00636116. In this analysis, only patients with copperhead snakebite as determined by the investigator and with clinical signs of envenomation were evaluated. Patients were randomized to one of three arms with the initial control and maintenance study drugs as follows: 1) F(ab')$_2$/placebo 2) F(ab')$_2$/F(ab')$_2$ 3) Fab/Fab. The primary outcome of this analysis is the number of repeat doses required to obtain initial control. Additional outcomes include the time from antivenom administration to initial control and the number of patients requiring additional doses after maintenance. Control of the envenomation syndrome was evaluated after start of antivenom, after each dose, and on days 5, 8, and 15. We performed a non-inferiority analysis of the combined F(ab')$_2$AV group with the FabAV group assuming a meaningful difference in the proportion of patients receiving repeat initial control doses or unscheduled post maintenance doses of 20%, and a meaningful difference in time to initial control of >1 hr.

Results: Of the 121 enrolled patients in the original trial, 21 (13 F(ab')$_2$AV, 8 FabAV) had definitive copperhead envenomation. Mean age was 43.9 (SD 21.4) years with a male predominance of 86%. Baseline snakebite severity score and time to antivenom were similar between F(ab')$_2$AV and FabAV groups. One (8%) F(ab')$_2$AV and 2 (25%) FabAV patients required repeat initial dosing, difference = 17%, 95% CI (-18, 57). One (8%) F(ab')$_2$AV and 1(13%) FabAV patients required additional doses after maintenance, difference = 5% ,95% CI (-27, 45). Median time to initial control was 2.7 IQR (2.0, 9.3) hours and 3.5 IQR (2.0, 7.4) for F(ab')$_2$AV and FabAV respectively, difference - 0.7 hours, 95% CI (-0.9, 2.6). Repeat initial dosing and time to initial control met the post hoc non-inferiority assumptions, whereas additional doses after maintenance did not. See figure.

Conclusions: A rigorous RCT comparing F(ab')$_2$ and Fab antivenom was performed and included a small subgroup of copperhead snakebite patients. A meaningful difference was determined in a post hoc manner and this exploratory analysis indicated that the available measures of the control of tissue injury were not statistically different between the two groups. Further work is required to verify these findings.

Figure: Comparison of F(ab')$_2$ with Fab antivenom.