the COVID-19 pandemic, Medicaid enrollment offset employer-based insurance losses precipitated by the recession. The aim of this study was to evaluate whether Medicaid expansion may have impacted COVID-19 mortality.

Methods. We conducted an ecologic study that included all US counties in the 50 states and District of Columbia. County-specific Medicaid expansion status was based on whether expansion was adopted within the state. COVID-19 cases and deaths for each county were obtained from the Centers of Disease Control (CDC). Unadjusted and multivariable negative binomial regression with robust standard errors to account for clustering of counties within each state were used to evaluate the association of COVID-19 deaths and Medicaid expansion status. Adjusted models included the addition of four sets of county-level covariates thought to influence the association of Medicaid status and COVID-19 fatality rate: demographics, comorbidities, economic indicators, and physician density. These analyses were then performed in subgroups of counties defined by urbanicity (metro, suburban or rural) and quartiles of poverty rates. Incidence Rate Ratios (IRR) and 95% confidence intervals (CI) are reported.

Results. A total of 1,814 Medicaid expansion and 1,328 non-expansion counties were included in the analysis. Crude case fatality rates were 2.1% (non-expansion) and 1.8% (expansion). Medicaid expansion was not associated with a significantly lower COVID-19 case fatality rate in either the unadjusted (IRR: 0.86; 95% CI: 0.74, 1.01) or fully adjusted (IRR: 1.02; 95% CI: 0.90, 1.16) models. In adjusted models, Medicaid expansion status was also not associated with differences in COVID-19 case fatality rate when counties were stratified by either urbanicity or percent of individuals living below the poverty line.

Conclusion. In this county-level analysis, Medicaid expansion status was not associated with a significant difference in county-level COVID-19 related case fatality rates among people of all ages. Future individual-level studies are needed to better characterize the effect of Medicaid on COVID-19 mortality.

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445. COVID-19 Pharmacotherapy Was Not Associated with Mortality in a Community Teaching System

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Session: P-21. COVID-19 Research

Background. During the COVID-19 pandemic, a task force was assembled to collect data on patient characteristics and treatment exposures to assess what factors may contribute to outcomes, and to help develop institutional treatment guidelines.

Methods. A retrospective study was performed on COVID-19 inpatient admissions within a four-hospital community health system over a six-month period from April-October 2020. Positive COVID-19 immunology results and/or in conjunction with related symptoms within a four-hospital community health system were used to define COVID-19. The use of corticosteroids, remdesivir, tocilizumab, and hydroxychloroquine, and admission to a critical care bed was not associated with a difference of in-hospital mortality. Patients who required vasopressors or NMBAs were associated with in-hospital mortality. Despite national trends reporting increased mortality in patients with obesity, diabetes, cardiovascular disease, and of African American race, this was not observed in our health system safety net hospitals.

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446. Prognostic Value of Absolute Lymphocyte Count for Disease Severity and Clinical Outcomes in Adult COVID-19 Inpatients

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Session: P-21. COVID-19 Research

Background. Lymphopenia has been reported as a relatively frequent finding in patients with coronavirus disease 2019 (COVID-19). This study aimed to assess the use of absolute lymphocyte count (ALC) as a prognostic biomarker for disease severity and clinical outcomes.

Methods. A cohort of adult patients with COVID-19 admitted to Memorial Healthcare System, Hollywood, Florida from March 7, 2020 to January 18, 2021 was retrospectively analyzed. An absolute lymphocyte count (ALC) < 1.1 x 10^7/L was used as cutoff point to define lymphopenia. Correlations of ALC upon admission with age and serum levels of C-reactive protein, interleukin-6, lactate dehydrogenase, and creatinine were analyzed. Univariate and multivariate regression models were developed to assess the association of lymphopenia with the risk of ICU admission and clinical outcomes.

Results. 4,485 hospitalized patients were included in the final analyses. Median age was 61 (interquartile range, 47-73) years and 2,311 (51.5%) were men. Lymphopenia was more frequent in patients admitted to the ICU compared to those that were not admitted to the ICU, with an odds ratio of 2.14 (95% confidence interval [CI], 1.78-2.56; p < .0001) (Figure 1). The actual value of the ALC was negatively correlated with age and serum levels of C-reactive protein, interleukin-6, lactate dehydrogenase, and creatinine (all p < .005). Patients with lymphopenia (n=2,409) compared to those without lymphopenia (n=2,076) had multivariable-adjusted odds ratios of 1.85 (95% CI, 1.53-2.24) for ICU admission, 2.08 (95% CI, 1.67-2.58) for intubation, 1.98 (95% CI, 1.31-3.00) for development of acute kidney failure, and 2.23 (95% CI, 1.79-2.79) for in-hospital mortality (Table 1). Analyses were adjusted for age, gender, race, hypertension, diabetes, chronic obstructive pulmonary disease, chronic kidney disease, coronary artery disease, malignancy, obesity, and smoking.

Conclusion. Lymphopenia in adult COVID-19 hospitalized patients was associated with increased risk of disease severity (as evidenced by need for ICU admission) and poor clinical outcomes. Absolute lymphocyte count may help with prognostication in individuals hospitalized with COVID-19.

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447. An Ordinal Scale Assessing SARS-CoV-2 Infected Patient Outcomes Using Electronic Health Records

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