increased more in thought unpleasantness and depressed feelings. To understand the community context, community distress markers were analyzed using Artificial Intelligence (AI)-based assessments of public Twitter posts from Bronx County during the same periods. These Twitter posts also showed a surge of COVID-related topics at the onset of the Bronx outbreak. Language analysis showed a 2019-2020 increase in Bronx community markers of anxiety, depressivity, and negatively-valenced affect extracted from Twitter. We observed 2019-2020 change in both individuals' well-being (via intensive reports) and in their communities (via Twitter). Contextualizing these with the increased COVID-19 discussion online suggests that these may reflect common pandemic effects.

Session 1055 (Paper)

COVID-19 Outcomes for Older Adults

AGE DIFFERENCES IN BECOMING COVID LONG-HAULERS AND IN POST-ACUTE SEQUELAE OF SARS-COV-2

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People who have had COVID-19 can suffer from the continuation of Post-Acute Sequelae of SARS-CoV-2 (PASC), also known as "long COVID", for months after infection. Understanding PASC is important for treatment, care, and projecting future health of the population. Since older adults are at higher risk of severe illness and consequences from COVID, we hypothesize that they are more likely to become COVID long-haulers and report more symptoms at the time of diagnosis and three months after. We use a nationally representative sample of adults from the Understanding America Study COVID-19 Survey, from March to December 2020, to estimate the prevalence of long COVID and identify the most common long-term symptoms and how they vary by age. We use multilevel models to examine the determinants of symptom count and change over time. Among the 608 people with a COVID diagnosis, 83 (13.7%) aged over 65; almost half (47.9%) reported symptoms three months after diagnosis; the proportion did not differ across age groups. The most common symptoms were fatigue (25.0%), runny/stuffy nose (18.9%), body aches (16.4%), sneezing (15.1%), and headache (13.6%). These symptoms were consistent across age groups, while people aged 65 and older reported significantly less cough ($\chi2=3.96$; P=0.05) and headache ($\chi2=4.24$; P=0.04) compared to their younger counterparts. Neither the mean at the time of the diagnosis nor the rate of change of the symptom count varied across age groups. Our analyses suggest that age is not a significant determinant of PASC symptom count or becoming a COVID long-hauler.

BEYOND CHRONOLOGICAL AGE: FRAILTY AND MULTIMORBIDITY PREDICT IN-HOSPITAL MORTALITY IN PATIENTS WITH COVID-19

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Background: We evaluated whether frailty and multimorbidity predict in-hospital mortality in patients with COVID-19 beyond chronological age. Methods: 165 patients admitted from March 8th to April 17th, 2020, with COVID-19 in an acute geriatric ward in Italy were included. Pre-disease frailty was assessed with the Clinical Frailty Scale (CFS). Multimorbidity was defined as the co-occurrence of ≥2 of these in the same patient. The hazard (HR) of in-hospital mortality as a function of CFS score and number of chronic diseases in the whole population and in those aged 70+ years were calculated. Results Among the 165 patients, 112 were discharged, 11 were transferred to intensive care units and 42 died. Patients who died were older (81.0 vs. 65.2 years, p<0.001), more frequently multimorbid (97.6 vs. 52.8%; p<0.001) and more likely frail (37.5 vs. 4.1%; p<0.001). Less than 2.0% of patients without multimorbidity and frailty, 28% of those with multimorbidity only and 75% of those with both multimorbidity and frailty died. Each unitary increment in the CFS was associated with a higher risk of in-hospital death in the whole sample (HR=1.3; 95%CI=1.05-1.62) and in patients aged 70+ years (HR=1.29;95%CI=1.04-1.62), whereas the number of chronic diseases was not significantly associated with higher risk of death. The CFS addition to age and sex increased mortality prediction by 9.4% in those aged 70+ years. Conclusions Frailty identifies patients with COVID-19 at risk of in-hospital death independently of age. Multimorbidity contributes to prognosis because of the very low probability of death in its absence.

COVID-19 CASES, HOSPITALIZATIONS, AND DEATHS IN NURSING HOMES: FACTORS IMPACTING THE SECOND SURGE

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As of March 2021, over 128,000 nursing home (NH) residents have died due to COVID-19 complications, accounting for one-third of all U.S. COVID-19 deaths. Early studies highlighted factors which heightened residents' risk—facility size and profit status, CMS Five-Star quality rating, race, and high Medicaid share. Despite improved nationwide social distancing and access to protective equipment, between October-December 2020 nursing home cases, hospitalizations, and deaths peaked to highest levels since the pandemic's advent. The purpose of this study is to quantify previously unexamined associations between resident, facility, and geographic characteristics and COVID-19 infections, hospitalizations, and fatalities in nursing homes during this second surge. In this cross-sectional study, we constructed a novel

dataset with linked facility- and county-level data from the CMS Nursing Home COVID-19 Public File, Nursing Home Compare, Long-Term Care Focus, and The New York Times. Multivariable logistic regression evaluated the odds of COVID-19 infections, hospitalizations, and deaths in nursing homes. Among 13,156 nursing homes, 80.5% reported ≥1 COVID-19 cases; on average, nursing homes reported 4.5 hospitalizations and 3.0 deaths. Facilities with higher acuity patients, chain status, >150 beds, high percentage white residents, low Medicaid share, high surrounding county case rates, and occupancy rates >75% were significantly (p <.001) related to increased odds of all outcomes. N95 mask shortages continued to increase risk of cases and hospitalizations. Five-Star ratings, high influenza vaccination rates, and clinical staff shortages were not significant factors. Findings demonstrate that through 2020, nursing homes continued to face challenges protecting their residents from COVID-19-related morbidity and mortality.

FACTORS ASSOCIATED WITH NURSING HOME RESIDENTS' COVID-19 INFECTIONS: A SYSTEMATIC REVIEW OF LITERATURE

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Background: Nursing homes were impacted disproportionately by the coronavirus because of their resident's vulnerabilities and settings. Even many previous studies illustrated factors related to nursing home residents' Covid-19 infections, there's no such study epitomizing those factors systematically, while some factors were controversial in different studies. The article aims to summarize major types of factors and provide crucially influential implications for nursing homes to prevent and manage their resident infections. Methods: All articles published between 01 January 2020 - 15 January 2021 in English version were searched through three electronic databases (PubMed, Web of Science, and Scopus). Two authors screened and evaluated a total of 121 studies independently based on selection and extraction criteria. Results: Seventeen identified studies were included in the research, which involved five major types of factors (nursing home's residence, nursing home, staff, resident, and others). Conclusion: nursing home's county infection rate, size, and staff residence were the strongest significant factors in many studies. Per-capital income, symptom-based screening and testing, and asymptomatic individuals have impacted resident's infections variously since the beginning of the pandemic. Nursing home's star rating and a total count of fines became factors when considered its locations. Other factors, including nursing home's type, historical health deficiencies, staffing level, and staff working different facilities, etc., were also significant factors. The value of factors suggests healthcare systems reflect appropriate measures and allocate more resources to nursing homes in high prevalence counties on the basis of universal allocation.

NO INCREASE IN SHORT-TERM MORTALITY FOLLOWING COVID-19 VACCINATION AMONG NURSING HOME RESIDENTS

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Reports of fatal adverse events following mRNA-based vaccination for COVID-19 in Norwegian nursing home (NH) residents have raised concern regarding vaccine safety in very old and frail persons. A limitation of these reports, however, is the absence of contemporaneous control groups, particularly given the high baseline mortality in this population. Using electronic health records' data on resident deaths, hospital transfer, vaccination, and daily census from Genesis Healthcare, a large NH provider spanning 24 U.S. states, we compared 7-day mortality and hospitalization rates for vaccinated versus unvaccinated NH residents. Between December 18, 2020 and December 31, 2020, 7006 residents across 118 NHs were vaccinated with the first dose. Mortality and hospital transfer rates within 7 days of vaccination were compared to rates for: (1) unvaccinated residents in the same facility within 7 days of the vaccine clinic (n=4414), and (2) residents in 166 yet-to-be-vaccinated facilities between December 25, 2020 and January 1, 2021 (n=17,076). We excluded residents with a positive SARS-CoV-2 diagnostic test within 20 days prior to their 7-day observation window. Mortality rates per 100,000 residents were lower among vaccinated (587, 95%CI: 431, 798) versus unvaccinated residents within the same facilities (984, 95%CI: 705, 1382), and compared to residents in not-yet-vaccinated facilities (912, 95%CI: 770-1080), with overlapping 95% CIs. Hospital transfers were lower among vaccinated residents than in either comparison group, but with overlapping CIs. Our findings suggest that short term mortality rates appear unrelated to vaccination for COVID-19 in NH residents, and should dispel concerns raised by previous reports.

Session 1060 (Paper)

Dementia and Cognitive Impairment: Policy and Programs

BUILDING A MODEL OF ADVOCACY: IMPROVING THE DEMENTIA CAPABILITY OF MANAGED CARE HEALTH PLANS IN CALIFORNIA

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Given the growing prevalence of Alzheimer's Disease and related dementias, and the intensity of this population's care needs, it is imperative that health plans (HPs) increase their dementia-capability. The Dementia Cal MediConnect (Dementia CMC) project proposes an innovative model of health care advocacy that can create dementia-capable