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.

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Purpose: There have been limited studies on the post-acute sequelae of SARS-CoV-2 (PASC) throughout the course of the disease and recovery. The purpose of this study was to identify the prevalence and associated factors of PASC in a diverse population to inform patients’ expectations and public health policy.

Methods & Materials: Confirmed Coronavirus Disease 2019 (COVID-19) surveillance data was obtained from the California Reportable Disease Information Exchange (CalREDIE) surveillance system between April 1, 2020 and December 10, 2020. Simple random sampling without replacement was used to select participants for the study. Interview questions, guided by the CalREDIE COVID-19 case investigation questionnaire, focused on tracking self-reported symptoms prior to diagnosis, at time of positive test result, one-month post-testing, two months post-testing, and on the date of the final interview.

Results: One third of participants reported PASC two months post-testing, most commonly reporting fatigue, anosmia, and dyspnea. Individuals forty years and older, female, Black/African American, and with asthma or obesity had the highest odds of developing PASC in our study population.

Conclusion: Age, gender, pre-existing conditions, and ethnicity/race were associated with developing PASC in a diverse sample of hospitalized and non-hospitalized participants. As the number of recovered COVID-19 patients increases, it is critical to understand the impacts of PASC and differential access to care and recovery among diverse populations in order to guide patient expectations and equitable public health policies.

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Epidemiological Surveillance of COVID-19, in the Province of Callao in Peru, from March 2020 to June 2021
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Purpose: Epidemiological surveillance of novel Coronavirus SARS CoV-2 in the Constitutional Province of Callao in Perú.

Methods & Materials: We used the data collection about the notifications of cases of COVID-19. The database was uploaded from the application of the national notification system (Notiweb). We analyzed the information from 13th March in 2020 to 27th June in 2021. Concerning deaths, the names and dates also corroborated by the death notification system (Sinadef).

Results: The first notified confirmed case in the region was a female patient on 13th March in 2020. We have 154 977 notifications cases as accumulated total; 97 381 confirmed cases (with laboratory analyzes that confirm infection), 43 970 suspected cases (compatible symptoms of COVID-19), 12 646 discarded cases and 984 compatible cases (suspected case more epidemiological criteria or suspected case more radiological criteria). The districts with more cases are Callao and Ventanilla. The group of age more affected was an adult (30-59 years old) with 43 702 cases (54.60%). The primary care is provided by three “Redes de Salud”: the Red de Salud Ventanilla report 17 421 confirmed cases of COVID-19, Red de Bonilla 13 706 confirmed cases and Red de Salud BEPECA 10 786 confirmed cases. The hospitals, private clinics and others notification centres report the rest of the cases. From 9290 deaths as confirmed cases, the majority occur at the big hospitals; 6948 deaths occur at EsSalud Hospitals, 1175 deaths at National Hospitals, 977 deaths at the Navy Army hospital, 45 deaths at private clinics. The rest outside third-level establishments; 92 deaths on their residence place, 45 on temporary isolation services, 06 on public roads and 02 on primary care’s centres.

Conclusion: The province of Callao is a remarkable region in Peru because it has two points of entry to the country, the International Airport “Jorge Chavez” and the international seaport “Terminal Portuario del Callao”, and also have 01 prisons. The curve of the total number of reported cases of COVID-19 shows two waves; this second wave is currently decreasing, with 9290 deaths over 97 381 confirmed cases, we have a Lethality rate of 9.54%

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PS04.13 (622)
Real-Time Estimation and Forecasting of COVID-19 Cases and Hospitalizations in Wisconsin HERC Regions for Public Health Decision Making Processes
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Purpose: The spread of the COVID-19 and surging number of cases have resulted in overtaxed healthcare systems. However, limited availability and questionable reliability of the data make outbreak prediction and resource planning difficult. Moreover, any estimates or forecasts are subject to high uncertainty and low accuracy when measuring such components. The aim of the study is to apply, automate, and assess a workflow for the real-time estimation and forecasting of COVID-19 cases and hospitalizations in Wisconsin HERC regions.

Methods & Materials: The reported cases are corrected for under-reporting and adjusted for test positivity by date of report. The corrected cases are estimated by date of infection, forecasted into the future, and transformed to date of report by region over time using a Bayesian latent variable model. The cases are corrected for hospitalization delay using log-normal distribution, and hospitalizations are estimated by county over time using Bayesian regression model. Models will be automated for real-time estimation and forecasting via RStudio Connect and made available as an R package.

Results: Both models were fitted weekly and forecasted over a 1-day or 3-day period during the peak of the epidemic from September 20, 2020 to December 6, 2020. For cases, both scenarios outperformed the credible level of the forecast where the 3-day period (20% CrI: 0.468, 50% CrI: 0.810, 90% CrI: 1.000) performed slightly better than the 1-day period (20% CrI: 0.462, 50% CrI: 0.785, 90% CrI: 1.000). Similarly, for hospitalizations, both periods outperformed the credible level of the forecast where the 3-day period (20% CrI: 0.368, 50% CrI: 0.667, 90% CrI: 0.987) performed slightly better than the 1-day period (20% CrI: 0.358, 50% CrI: 0.653, 90% CrI: 0.987).

Conclusion: We present an approach to estimate and forecast cases and hospitalizations and the corresponding uncertainty using publicly available data. The models were able to infer short-term trends consistent with reported values at the HERC region level. Models were able to accurately forecast and estimate the uncertainty of the measurements. This study can help to elucidate