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| **Evaluation of COVID-19 Severity Prediction Scores in Aotearoa New Zealand 2022** |
| Maze MJ1, Williman J2, Best E3, Bhally H4, Bryce A4, Chang CL5, Chen K6, Dummer J8, Epton M9, Good W10, Goodison J6, Grey C11, Grimwade K6, Hancox RJ5,12, Hassan R4, Hills T13, Hotu S14, McArthur C15, Morpeth S16, Murdoch D17, Pylypchuk R18, Raymond N19, Ritchie S13, Ryan D20, Storer M9, Walls T21, Webb R3, Wong C10,22, Wright K7 |
| *1. Department of Medicine, University of Otago, Christchurch, 2. Department of Population Health, University of Otago, Christchurch, 3. Department of Paediatrics, University of Auckland, 4. Infectious Diseases Department, Te Whatu Ora Waitematā, 5. Respiratory Department, Te Whatu Ora Waikato, 6. Infectious Diseases Department, Te Whatu Ora Hauora a Toi Bay of Plenty, 7. Te Kupenga Hauora Māori, University of Auckland, 8. Department of Medicine, University of Otago, 9. Respiratory Department, Te Whatu Ora Waitaha Canterbury, 10. Respiratory Department, Te Whatu Ora Counties Manukau, 11. Department of General Practice and Primary Healthcare, University of Auckland, 12. Department of Preventive and Social Medicine, University of Otago, 13. Department of Infectious Diseases, Te Whatu Ora Auckland, 14. Respiratory Medicine Department, Te Whatu Ora Auckland, 15. Department of Critical Care Medicine, Te Whatu Ora Auckland, 16. Department of Infectious Diseases, Te Whatu Ora Counties Manukau, 17. Department of Pathology and Biomedical Science, University of Otago, Christchurch, 18. Department of Epidemiology and Biostatistics, University of Auckland, 19. Department of Infectious Diseases, Te Whatu Ora Capital, Coast and Hutt Valley, 20. Pacific Perspectives, Wellington, 21. Department of Paediatrics, University of Otago, Christchurch, 22. Faculty of Medical and Health Sciences, University of Auckland.* |
| **Introduction/Aim:** COVID-19 severity prediction scores are useful for clinical management, but need evaluation in the contemporary New Zealand context.We sought to describe COVID-19 related illness and evaluate existing severity scores.  **Methods:** We conducted a Tiriti-centred retrospective cohort study in adults (age ≥16 years with COVID-19, hospitalised at 11 hospitals from 1 January – 1 May 2022, including all Māori and Pacific, and every second non-Māori, non-Pacific (NMNP) patient to achieve sufficient analytic power for each ethnic grouping. We conducted chart review and linked to national datasets. We evaluated attribution of admission to COVID-19, collected clinical data; and assessed the accuracy of severity scores to predict death in hospital or within 28 days.  **Results:** Of 4,459 admissions, 2,375 (53%) were due to COVID-19. Of 2,319 patients included, 25% identified as Māori, 39% Pacific, and 37% NMNP. Some 408 (18%) had pulmonary radiographic infiltrates, 599 (26%) received oxygen, and 146 (6%) died. C-statistics of severity scores were: 4C mortality, Maori 0.83 (95% CI 0.77, 0.89), Pacific 0.87 (95% CI 0.83, 0.91), NMNP 0.90 (0.87, 0.93); CURB-65 Māori 0.83 (95% CI 0.77, 0.89), Pacific 0.87 (95% CI 0.84, 0.91), NMNP 0.87 (0.83, 0.91); and modified PRIEST, Maori 0.85 (95% CI 0.80, 0.90), Pacific 0.81 (95% CI 0.76, 0.86), NMNP 0.83 (95% CI 0.79, 0.88).  **Conclusion:** Half of COVID-19 associated hospitalisations were attributed to COVID-19. Pneumonitis was uncommon and mortality was 6%. Severity scores accurately predict risk for Māori, Pacific and NMNP, but confidence intervals are broadest for Māori.  **Grant Support:** Manatū Hauora | New Zealand Ministry of Health |