

# Pacific Health Review

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Issue 40 – 2025

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### Abbreviations used in this issue

**COVID-19** = coronavirus disease 2019  
**ACS** = acute coronary syndrome  
**ICU** = intensive care unit  
**STEMI** = ST elevation myocardial infarction

### KINDLY SUPPORTED BY:



**Kia orana, Fakaalofa lahi atu, Talofa lava, Malo e lelei, Bula vinaka, Taloha ni, Kia ora, Greetings.**

## Welcome to the latest issue of Pacific Health Review.

This issue covers a range of topics of interest to Pacific people living in Aotearoa New Zealand and the Pacific Region, with a particular emphasis on health inequities.

We hope you find this issue interesting, and welcome your feedback.

Kind regards,

**Sir Collin Tukuitonga**

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## Common mental disorders and psychological distress among Pacific adults living in Aotearoa New Zealand

**Authors:** Ataera-Minster J et al.

**Summary:** This study examined the prevalence of common mental disorders (depression and anxiety) among Pacific adults living in NZ. Data were extracted from multiple NZ Health Survey waves from 2014/2015 to 2018/2019 for Pacific adults aged  $\geq 15$  years. Analysis of the data according to sociodemographic factors showed that doctor-diagnosed common mental disorders were more prevalent in Pacific women than in Pacific men, in adults aged 24–64 years versus 15–24 years, and in those living in the least deprived versus the most deprived areas. Depression and/or anxiety were more common in adults affiliated with Pacific Realm countries (Cook Islands Māori and Niueans) than in those affiliated with non-Realm countries. Psychological distress was found to be more prevalent in Pacific females and Cook Islands Māori.

**Comment:** This study presents interesting findings on depression and anxiety in Pacific adults living in NZ prior to COVID-19, albeit with methodological limitations (e.g. small population samples). The higher prevalence in people from Pacific Realm countries and those living in the least deprived areas points to the importance of providing targeted services for Pacific women, communities living in deprived areas and for adults from Pacific Realm countries. What is urgently needed is current data on the mental health of Pacific adults to provide longitudinal patterns of mental disorders across all Pacific communities to see whether these patterns remain, as well as to gain better insights into the levels of undiagnosed mental disorders across all Pacific populations. This information would be valuable for addressing growing gaps between mental health needs and services.

**Reference:** *N Z Med J.* 2025;138(1613):36–49

[Abstract](#)

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INDEPENDENT COMMENTARY BY

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Sir Collin Tukuitonga is a medical graduate and Public Health Physician with extensive experience in health policy, research, management, and leadership in NZ and internationally. He is the inaugural Associate Dean Pacific and Associate Professor of Public Health at the University of Auckland. Prior to this role, he was the Director-General of the Pacific Community based in New Caledonia.



INDEPENDENT COMMENTARY BY

**Dr Roannie Ng Shiu**

Dr Roannie Ng Shiu is the Pasifika Medical Association (PMA) Senior Research Fellow with the University of Auckland Faculty and Medical and Health Sciences Office of the Associate-Dean Pacific. Her primary role is to deliver robust high-quality Pacific health equity research and to increase the Pacific health workforce in Aotearoa with the recruitment and retention of Pacific health students. She was previously with the Department of Pacific Affairs at the Australian National University. Roannie is Samoan and was raised in South Auckland and graduated from the University of Auckland with a PhD in Community Health.

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CV, cardiovascular; HF, heart failure; LVEF, left ventricular ejection fraction. **References:** 1. JARDIANCE Data Sheet. 2. Packer M et al. N Engl J Med 2020;383:1413-24. 3. Anker SD et al. N Engl J Med 2021;385:1451-61. 4. Pharmac Schedule: <http://schedule.pharmac.govt.nz/ScheduleOnline.php>. Accessed March 2025.

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## Capturing diversity in cancer incidence and outcomes among the New Zealand Pacific population using linked administrative data

**Authors:** Satherley N & Sporle A

**Summary:** This study investigated the incidence of cancer among Pacific people living in NZ. Analysis of data extracted from the NZ Cancer Registry for the period 1995–2022 showed that the incidence rate of all cancers in Pacific people was 201.7 per 100,000. There was variability in age-standardised all-cancer incidence among different Pacific groups, whereby the average annual incidence (per 100,000) was highest among Cook Islands Māori (217.5) and Tongans (217.7), and lowest among Tokelauan (192.4) and Fijian people (160.7). The overall incidence of gastric cancer among Pacific groups was 8.0 per 100,000. A higher rate was observed among those of Niuean and Samoan ethnicity, and lower rates were seen in Cook Islands Māori and Tokelauans. Mortality rates within 1–5 years after cancer diagnosis decreased over time.

**Comment:** This is an important methodological study investigating cancer incidences in Pacific populations. The findings demonstrate how administrative data can provide valuable insights, but for more robust analyses there is need for improved data collection and reporting methods for minority groups. The findings highlight key considerations for policymakers and health services when designing cancer prevention, screening and treatment programmes for a growing diverse Pacific population. Ongoing monitoring and research is needed to address data gaps arising from the high mobility of Pacific populations, particularly from NZ Realm countries.

**Reference:** *N Z Med J.* 2025;138(1613):50–66  
[Abstract](#)

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## Variation in emergency medical service use for acute coronary syndromes by ethnicity: An Aotearoa New Zealand observational study

**Authors:** Dicker B et al.

**Summary:** This study investigated whether emergency medical service (EMS) use varies by ethnicity among patients with ACS in NZ. A total of 19,283 patients hospitalised with ACS in 2019–2021 were included. Overall, 25% of them had STEMI, 55% had non-STEMI, and 20% had unstable angina. In those with STEMI, EMS use was lower in Māori (adjusted odds ratio [aOR] 0.72, 95% CI 0.58–0.90), Pacific (aOR 0.64, 95% CI 0.48–0.87), Indian (aOR 0.63, 95% CI 0.43–0.86), and non-Indian Asian (aOR 0.52, 95% CI 0.37–0.74) patients compared with NZ Europeans. Findings were similar for non-STEMI. For patients with unstable angina, the odds of EMS use were lower for all ethnic groups compared with Europeans, but the reductions were not statistically significant (except for non-Indian Asian patients).

**Comment:** Pacific and Māori populations are disproportionately affected by cardiovascular disease compounded by a higher prevalence of risk factors such as diabetes, and are more likely to experience early onset of cardiovascular disease. Despite these factors highlighting the need for better prevention, intervention and treatment, this study reports ongoing and persistent health inequities for Pacific populations. The findings highlight the importance of access to EMS as well as increasing awareness of ACS symptoms for Pacific communities. These can help Pacific patients to access timely care and prevent deaths.

**Reference:** *N Z Med J. 2025;138(1611):33–54*

[Abstract](#)

## Disparities in patient mortality following intensive care admission due to adult community-acquired sepsis in Aotearoa New Zealand, 2009–2019

**Authors:** McTavish S et al.

**Summary:** This NZ study investigated disparities in patient mortality after ICU admission for community-acquired sepsis in 2009–2019. Patients were followed from ICU admission to time of death (or until 1 year post-hospital discharge). In-hospital mortality was 16.3%. Post-discharge mortality was 3.6% at 30 days, 9.1% at 180 days and 12.9% at 365 days. The risk of in-hospital mortality did not differ according to ethnicity or NZ Index of Deprivation quintile. However, significant differences in post-discharge mortality were observed for ethnicity, area deprivation quintile, and presence of severe comorbidities.

**Comment:** This is an important study in an area that is severely under researched. The findings underscore existing health disparities in mortality risk for Pacific and Māori populations and people living in areas of high deprivation that correlate with worse post-discharge outcomes. The findings suggest that factors external to hospital care play a critical role in patient recovery and survival. The presence of severe comorbidities and serious underlying health conditions common in Pacific patients were also identified as predictors of mortality following discharge. To improve outcomes for Pacific patients, enhanced post-discharge support is necessary to help mitigate mortality risks, as well as addressing social determinants of health such as transportation, healthcare literacy and timely access to health care. Future studies should focus on addressing barriers to post-discharge care and follow up and the role that community support networks can play in improving health outcomes and survival rates.

**Reference:** *N Z Med J. 2025;138(1610):13–30*

[Abstract](#)

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## Rheumatic fever trends in the context of skin infection and Group A Streptococcal sore throat programmes in the Bay of Plenty: An observational study, 2000–2022

**Authors:** Malcolm J et al.

**Summary:** This study investigated whether hospital admissions for skin infections and acute rheumatic fever (ARF) in the Bay of Plenty declined for preschool, school-age and young adults after health initiatives addressing Group A Streptococcal (GAS) sore throats and skin infections commenced in 2011. Admissions for serious skin infections declined after 2011. Compared with rates in 2007–2010, skin infection admission rates for Māori in 2017–2019 declined by 40% in preschoolers, 14% in school-aged children and 24% in young adults. Rates of ARF in individuals aged <30 years declined by 29% from 2000–2010 to 2011–2019. Patients with ARF were predominantly Māori (90%), and 80% of cases were school-aged. Risk ratios were 24.33 for Māori versus NZ European; 3.97 for Māori with high versus moderate deprivation; and 2.23 for males versus females. Of 49 ARF cases in the Bay of Plenty in 2015–2022, 35 had recently had positive community or hospital GAS swabs.

**Comment:** Despite improvements in ARF interventions, this study shows that Pacific people and in particular preschoolers still exhibit high infection rates, indicating ongoing health challenges. To better understand these ongoing health challenges and provide solutions, future research should focus on understanding causal pathways linking social determinants to health outcomes in Pacific communities. Access to integrated models of care that combine health care and social support services for all Pacific communities can help address broader determinants of health. Research should also explore innovative approaches to engage Pacific children and young people.

**Reference:** *N Z Med J. 2025;138(1609):15–44*

[Abstract](#)

## Acute rheumatic fever in Canterbury, Aotearoa New Zealand, 2012–2022

**Authors:** Su'a T et al.

**Summary:** This study investigated the clinical characteristics of acute rheumatic fever (ARF) cases aged <30 years in the Canterbury region in 2012–2022. A total of 34 cases were identified. Twenty-nine cases were diagnosed with a first episode of ARF and five were diagnosed with rheumatic heart disease without a previously identified episode of ARF. Overall, ARF rates in Canterbury were significantly lower than those in the rest of NZ. The majority of patients receiving ongoing prophylactic treatment for ARF in the region had migrated from the North Island or the Pacific Region.

**Comment:** This is the first study of ARF in the South Island and it provides important baseline data about ARF in Canterbury. While Canterbury rates of ARF are significantly lower than the rest of Aotearoa, Pacific peoples were approximately 20 times more likely to be diagnosed with ARF than any other ethnic group. This underscores the need for targeted interventions for Pacific communities in Canterbury. Most patients receiving treatment in Canterbury were Pacific patients (69%) and were diagnosed in Auckland or the Pacific region. The migration finding highlights the importance of continuity of care across different health regions as well as the need for a robust national surveillance system.

**Reference:** *N Z Med J. 2025;138(1609):45–55*

[Abstract](#)

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## Epidemiology of skin infections in Auckland, New Zealand

**Authors:** Mala K et al.

**Summary:** This population-based study described the epidemiology of *Staphylococcus aureus* and *Streptococcal pyogenes* skin infections in the Auckland region. Skin swab cultures collected in primary care for over one-quarter of the Auckland population in 2010–2020 were analysed. *S. aureus* affected all demographics, whereas *S. pyogenes* infection rates were higher for children aged <10 years versus ≥10 years (rate ratio [RR] 3.1, 95% CI 3.1–3.2), for Māori and Pacific people versus European/Other (RR 4.7, 95% CI 4.6–4.8) and for individuals in the most socioeconomically deprived areas versus those in the least deprived areas (RR 2.1, 95% CI 1.9–2.3). *S. aureus* infection was found to be a risk factor for co-infection with *S. pyogenes*.

**Comment:** Skin infections are often considered minor. However, they can cause significant discomfort and, if untreated, can lead to long-term health problems, sepsis and death. In children, skin infections can also have profound impacts on learning and educational outcomes. Like many other health issues and diseases, skin infection rates are high for Pacific and Māori populations and for those living in high areas of deprivation. The high prevalence of skin infections including co-infection risk in Pacific children requires an urgent response to improve diagnosis, treatment and management of complications. Targeted public health interventions such as new treatments, vaccines and awareness to improve hygiene practices and early detection of skin infections (bacterial, viral and fungal) will help to reduce the health burden and health disparities.

**Reference:** *N Z Med J.* 2025;138(1609):56–69

[Abstract](#)

## Projected increases in the prevalence of diabetes mellitus in Aotearoa New Zealand, 2020–2044

**Authors:** Teng A et al.

**Summary:** This modelling study estimated the future combined prevalence of types 1 and 2 diabetes in NZ. National-level data on diabetes prevalence were extracted from the Virtual Diabetes Register to determine recent diabetes prevalence trends (2006–2019) and to project diabetes prevalence trends from 2020 to 2044. It was determined that the absolute volume of diabetes in NZ would increase by nearly 90% to more than 500,000 by 2044, and the age-standardised prevalence of diabetes would increase from around 3.9% of the population to 5.0% overall. The projected increase in prevalence of diabetes diagnoses was most marked in Pacific people, particularly females.

**Comment:** This study provides a compelling and sobering picture of projected diabetes prevalence in Aotearoa. Diabetes disproportionately affects Pacific peoples in Aotearoa, and this disparity is projected to worsen, widening the gap with European populations. The use of age-period-cohort modelling offers a more nuanced prediction by taking into account ageing and cohort effects. The findings are clear – urgent action is needed to address the broader root causes and risk factors of diabetes prevalence with targeted interventions for Pacific women and communities. While there has been an increase in research and interventions focused on addressing diabetes, more research is required to find effective and sustainable solutions to enhance preventative health measures and improve diabetes management that works for Pacific communities. These actions are needed to reduce the strain diabetes will have on the healthcare system and improve quality of life for thousands of people in Aotearoa.

**Reference:** *N Z Med J.* 2025;138(1608):94–106

[Abstract](#)

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## Tertiary institution's duty of care for the health and well-being of Pacific students during COVID-19 pandemic

**Authors:** Sopoaga F et al.

**Summary:** This cross-sectional study explored the level of support provided by Otago University to Pacific tertiary students during the COVID-19 pandemic. An online survey was completed by 358 of 1277 (28%) Pacific students attending the university in 2022. Three-quarters of respondents reported having to isolate at some stage during the academic year, either because they had COVID-19 or were considered a close contact. 356 (99%) of them had received a health pack, and two-thirds (67.6%) had accessed other support from the University.

**Comment:** This study presents an important and useful snapshot into the experiences of Pacific tertiary students during COVID-19. While COVID-19 was an unprecedented global pandemic the responses provide important lessons to address future pandemics. Medical and health tertiary students are already under enormous stress with the demands of tertiary training and the added financial and health costs of the pandemic necessitated a strong pastoral care response from tertiary institutions. This research highlights the importance of strengthening support systems, addressing equity in health and education, and the benefits of collaborating with local communities to address the unique needs of ethnic minority groups.

**Reference:** *J Prim Health Care* 2025;17(1):17–22

[Abstract](#)

## Modified APPEND score for the diagnosis of acute appendicitis in a New Zealand Pasifika population

**Authors:** Pitesa R et al.

**Summary:** The APPEND score incorporates C-reactive protein (CRP) levels and was developed in NZ to assist with the diagnosis of acute appendicitis. This study evaluated a modified APPEND score without CRP (mAPPEND) for diagnosing appendicitis in a NZ Pacific population. One hundred and forty-three Pacific patients aged ≥5 years who presented to Middlemore Hospital with right iliac fossa pain in 2011 or 2017 were included; those with prior appendectomy or generalised peritonitis were excluded. Area under the receiver-operating characteristic curve (a measure of diagnostic performance) was comparable for both the APPEND and mAPPEND scores. The mAPPEND score had high diagnostic accuracy, with scores of 1 and 2 showing high sensitivity and negative predictive value; scores of 4 and 5 showing high specificity and positive predictive value, and a score of 3 being the most efficient.

**Comment:** This validation study provides insights into an important diagnostic development tool and shows the importance of validating clinical predictions across ethnic populations. While the sample size was small the findings point to promising advancements particularly for Pacific countries with limited resources – providing a simple and accurate diagnostic tool that does not require advanced imaging and biochemical testing. This will help with timely and accurate diagnostics and prevent costs associated with unnecessary procedures. Further large-scale validation research is needed to establish Pacific regional applicability and support implementation in clinical practice. Similar clinical validation studies would be of benefit for other diagnostic tools, especially those designed for non-communicable diseases.

**Reference:** *World J Surg.* 2025;49(4):868–72

[Abstract](#)

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