Health: Acute medical admissions

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In an acute medical admission, a person is admitted to a hospital because they require urgent specialist attention, for any of a wide range of medical or frailty-related conditions.

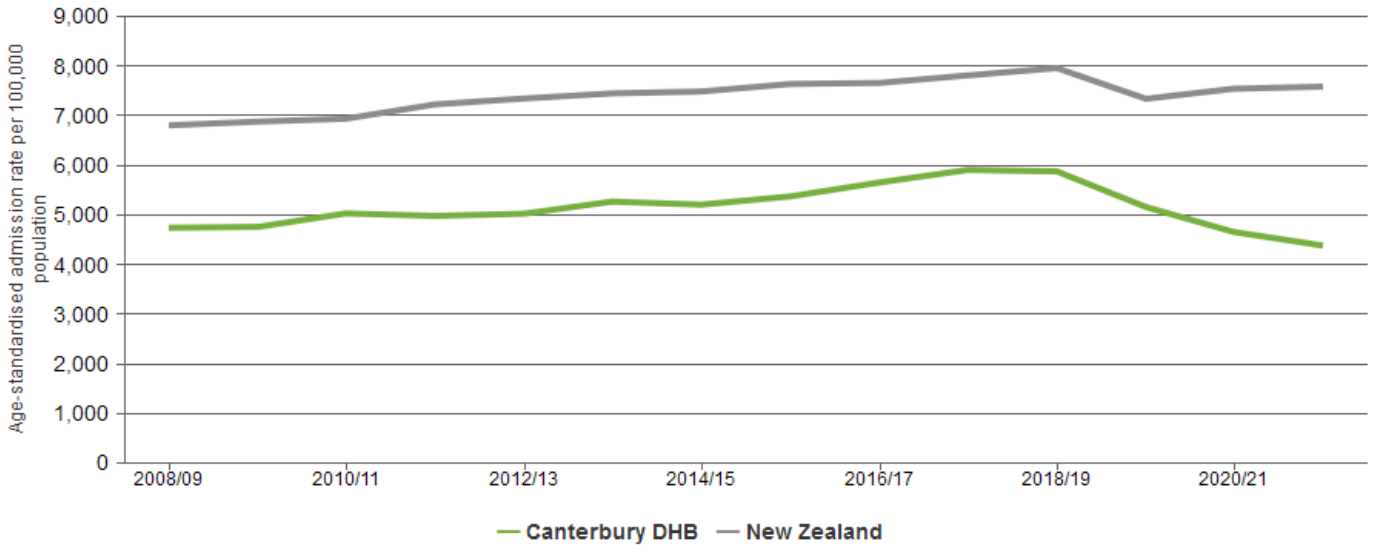
An increase in acute medical admission rates may reflect improved access to health care but is more likely to represent a deterioration in the health status of the population and/or lost or underexplored opportunities to both protect against risk factors for developing long-term conditions and support people to manage those conditions by providing good care in the community (mainly through organised general practice) [8].

The most likely drivers of change in acute medical admission rates include: changes to provision of primary and community health care services [41]; demographic changes (for example an ageing population or changes in the proportions in different ethnic groups); shifts in the socioeconomic status of the population; changes in the prevalence of disease [42], including due to changes in risk factors such as smoking and alcohol consumption [43]; changes in the social context, such as increased expectations from patients; and other unknown factors [8].

Canterbury has had a long-standing primary care-led acute demand programme (Acute Demand Management Services, ADMS) that has focused on hospital admission avoidance, and approximately 30,000 people were managed in the community in 2019/20 via the ADMS. The impact of this programme has been to enable a lower level of hospital admissions in Canterbury.

This indicator presents the age-standardised rate of acute medical admissions per 100,000 population, for all ages, in the Canterbury DHB region and New Zealand, 2008–2022.

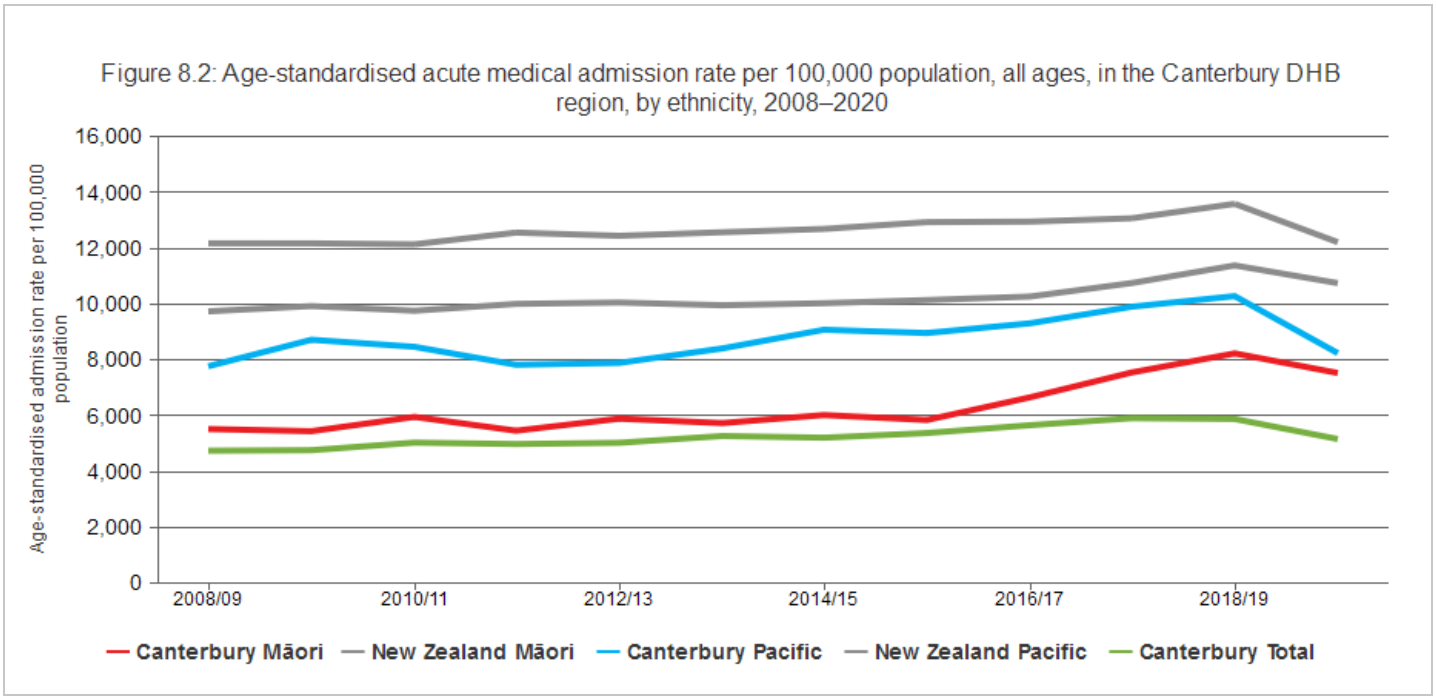
Figure 8.1: Age-standardised acute medical admission rate per 100,000 population, all ages, in the Canterbury DHB region and New Zealand, 2008–2022



The figure shows that the age-standardised rate of acute medical admissions has been steadily increasing over time in the Canterbury DHB region and in New Zealand overall (Canterbury DHB 4,743/100,000 and New Zealand 6,809/100,000 in 2008/09 compared with Canterbury DHB 5,772/100,000 and New Zealand 7,945/100,000 in 2018/19). The Canterbury DHB

region has maintained a lower age-standardised acute medical admission rate than New Zealand overall during the period 2008/09 to 2021/22 (4,381/100,000 and 7,575/100,000 respectively in 2021/22). Acute medical admissions have declined notably in the Canterbury DHB from 2018/19 and it is likely that the period 2018/19 – 2021/22 was influenced by COVID-19 restrictions.

Breakdown by ethncity



The figure shows that the age-standardised rate of acute medical admissions for Pacific peoples has been substantially higher than for all people in the Canterbury DHB region, over the time series shown (Note: the 2020/21 time-point is not available by ethnicity). The rate for Māori has been similar to that of all people in the Canterbury DHB region from 2008 to approximately 2016, however the rate has increased noticeably since 2016. The figure shows substantial difference for both Māori and Pacific peoples from 2017/18 (Māori, 7525/100,000; Pacific, 8235/100,000; Canterbury DHB overall, 5163/100,000 in 2019/20). The general pattern shown for age-standardised rates of acute medical admissions, by ethnicity, is similar to New Zealand overall (data not shown).

Data Sources

Source: Te Whatu Ora Waitaha Canterbury - formerly the Canterbury District Health Board.
Survey/dataset: National Minimum Dataset, NZ Statistics population projections for population based funding.
Source data frequency: Annually.

Metadata for this indicator is available at https://www.canterburywellbeing.org.nz/our-wellbeing/index-data

REFERENCES

This is the full reference list for **Health**.

1 Marmot M, Allen J, Bell R, Bloomer E, Goldblatt P (2012) WHO European review of social determinants of health and the health divide. *Lancet* 380: 1011-1029.

2 Keefe V, Reid P, Ormsby C, Robson B, Purdie G, et al. (2002) Serious health events following involuntary job loss in New Zealand meat processing workers. *International Journal of Epidemiology* 31: 1155-1161.

3 Howden-Chapman P, Matheson A, Crane J, Viggers H, Cunningham M, et al. (2007) Effect of insulating existing houses on health inequality: cluster randomised study in the community. *BMJ* 334: 460.

4 Ross CE, Wu C-l (1995) The Links Between Education and Health. *American Sociological Review* 60: 719-745.

5 McKee-Ryan F, Song Z, Wanberg CR, Kinicki AJ (2005) Psychological and physical well-being during unemployment: a meta-analytic study. *J Appl Psychol* 90: 53-76.

6 Cormack DM, Harris RB, Stanley J (2014) Investigating the Relationship between Socially-Assigned Ethnicity, Racial Discrimination and Health Advantage in New Zealand. *PLoS ONE* 8: e84039.

7 Robson B, Harris R (2007) *Hauora: Màori Standards of Health IV. A study of the years 2000–2005*; Robson B, Harris R, editors. Wellington: Te Ròpù Rangahau Hauora a Eru Pòmare.

8 Hider P (1998) *Acute medical admissions: a critical appraisal of the literature*. New Zealand Health Technology Assessment Clearing House.

9 Peter M. Fayers, Hays RD, editors (2005) Assessing Quality of Life in Clinical Trials: Methods and Practice. 2 ed. Oxford: UK: Oxford University Press. 467 p.

10 Idler EL, Benyamini Y (1997) Self-rated health and mortality: a review of twenty-seven community studies. *J Health Soc Behav* 38: 21-37.

11 CDHB (2017) *Canterbury Wellbeing Survey, June 2017: Report prepared by Nielsen for the Canterbury District Health Board and partnering agencies.* Christchurch: Canterbury District Health Board.

12 Health Promotion Agency (2020) Smokefree facts and figures. Retrieved from https://www.smokefree.org.nz/smoking-its-effects/facts-figures.

13 Ministry of Health (2019) *Annual Data Explorer 2018/19: New Zealand Health Survey* [Data File]. Retrieved from https://minhealthnz.shinyapps.io/nz-health-survey-2018-19-annual-data-explorer/.

14 National Center for Chronic Disease Prevention and Health Promotion (US) (2014) *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Patterns of Tobacco Use Among U.S. Youth, Young Adults, and Adults.* Atlanta (GA): Office on Smoking and Health, Centers for Disease Control and Prevention (US).

15 U.S. Department of Health and Human Services (USDHHS) (1994) *A report of the Surgeon General: Preventing tobacco use among young people*. Atlanta, GA: Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

16 U.S. Department of Health and Human Services (USDHHS) (2012) *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta (GA): Centers for Disease Control and Prevention (US).

17 Ministry of Health (2013) *Health Loss in New Zealand: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016*. Wellington: Ministry of Health.

18 Banks E, Joshy G, Weber MF, Liu B, Grenfell R, et al. (2015) Tobacco smoking and all-cause mortality in a large Australian cohort study: findings from a mature epidemic with current low smoking prevalence. *BMC Medicine* 13: 38.

19 World Health Organization (2015) *WHO report on the global tobacco epidemic, 2015: Raising taxes on tobacco*. Geneva: WHO. ISBN 978 92 4 069460 6.

20 Ministry of Health (2018) Regional Data Explorer 2014–17: New Zealand Health Survey [Data File].

21 Ministry of Health (2017) *Methodology Report 2016/17: New Zealand Health Survey*. Wellington: Ministry of Health.

22 WHO (2007) *Global Database on Body Mass Index.* Geneva: World Health Organization.

23 Ministry of Health (2017) *Clinical Guidelines for Weight Management in New Zealand Adults*. Wellington: Ministry of Health, Clinical Trials

Research Unit.

24 Ministry of Health (2018) Obesity. Retrieved from www.health.govt.nz/our-work/diseases-and-conditions/obesity

25 Ministry of Health (2016) *Annual Update of Key Results 2015/16: New Zealand Health Survey*. Wellington: Ministry of Health.

26 Swinburn BA, Sacks G, Hall KD, McPherson K, Finegood DT, et al. (2011) The global obesity pandemic: shaped by global drivers and local environments. *Lancet* 378: 804-814.

27 Drewnowski A (2009) Obesity, diets, and social inequalities. *Nutr Rev* 67 Suppl 1: S36-39.

28 Physical Activity Guidelines Advisory Committee (2018) *2018 Physical Activity Guidelines Advisory Committee Scientific Report*. Washington, DC: U.S. Department of Health and Human Services.

29 McLean G, Tobias M (2004) *The New Zealand Physical Activity Questionnaire: Report on the validation of the NZPAQ-long and NZPAQ-short form physical activity questionnaires*. Wellington: Sport and Recreation New Zealand.

30 Craig CL, Marshall AL, Sjostrom M, Bauman AE, Booth ML, et al. (2003) International physical activity questionnaire: 12-country reliability and validity. *Med Sci Sports Exerc* 35: 1381-1395.

31 Ministry of Health (2018) Annual Data Explorer 2017/18: New Zealand Health Survey [Data File].

32 Babor TF, Higgins-Biddle JC, Saunders JB, Monteiro MG, World Health Organization (2001) *AUDIT: the alcohol use disorders identification test: guidelines for use in primary health care*. Geneva: World Health Organization.

33 Ministry of Health (2013) Hazardous drinking in 2011/12: Findings from the New Zealand Health Survey. Retrieved from www.moh.govt.nz/NoteBook/nbbooks.nsf/0/81BF301BDCF63B94CC257B6C006ED8EC/$file/12-findings-from-the-new-zealand-health-survey.pdf

34 Braillon A, Dubois G (2005) Alcohol and public health. *Lancet* 365: 1387.

35 Health Promotion Agency (2016) *Alcohol – the Body and Health Effects: A brief overview*. Wellington: Health Promotion Agency.

36 GBD 2016 Alcohol Collaborators (2018) Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 392: 1015-1035.

37 Connor, J., Kydd, R., Shield, K., & Rehm, J. (2015). The burden of disease and injury attributable to alcohol in New Zealanders under 80 years of age: marked disparities by ethnicity and sex. *N Z Med J, 128*(1409), 15-28.

38 Hall JJ, Taylor R (2003) Health for all beyond 2000: the demise of the Alma-Ata Declaration and primary health care in developing countries. *Med J Aust* 178: 17-20.

39 Winnard D, Crampton P, Cumming J, Sheridan N, Neuwelt P, et al. (2008) *Population Health – Meaning in Aotearoa New Zealand? A discussion paper to support implementation of the Primary Health Care Strategy*. Auckland: Auckland Regional Public Health Service.

40 Neuwelt P, Matheson D, Arroll B, Dowell A, Winnard D, et al. (2009) Putting population health into practice through primary health care. *NZ Med J* 122: 98-104.

41 Schluter PJ, Hamilton GJ, Deely JM, Ardagh MW (2016) Impact of integrated health system changes, accelerated due to an earthquake, on emergency department attendances and acute admissions: a Bayesian change-point analysis. *BMJ Open* 6: e010709.

42 Galenkamp H, Deeg DJH, de Jongh RT, Kardaun JWPF, Huisman M (2016) Trend study on the association between hospital admissions and the health of Dutch older adults (1995–2009). *BMJ Open* 6: e011967.

43 Mordal J, Bramness JG, Holm B, Mørland J. (2008) Drugs of abuse among acute psychiatric and medical admissions: laboratory based identification of prevalence and drug influence. Gen Hosp Psychiatry 30(1):55-60.

44 Kessler RC, Angermeyer M, Anthony JC, R DEG, Demyttenaere K, et al. (2007) Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry* 6: 168-176.

45 Ministry of Health (2017) *Office of the Director of Mental Health Annual Report 2016*. Wellington: Ministry of Health.

46 Ministry of Health (2018) PRIMHD: Mental health data. Retrieved from www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/primhd-mental-health-data

47 Oakley Browne MA (2006) Lifetime prevalence and lifetime risk of DSM-IV disorders. In: Oakley Browne MA, Wells JE, Scott KM, editors. Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health.

48 Kessler RC, Foster CL, Saunders WB, Stang PE (1995) Social consequences of psychiatric disorders, I: Educational attainment. *American Journal of Psychiatry* 152: 1026–1032.

49 The Mental Health Commission (1998) *Blueprint for Mental Health services in New Zealand. How things need to be*. Wellington: The Mental Health Commission.

50 The Mental Health Commission (2012) *Blueprint II Improving mental health and wellbeing for all New Zealanders. How things need to be*. Wellington: The Mental Health Commission.

51 Cerdá M, Tracy M, Galea S (2011) A prospective population based study of changes in alcohol use and binge drinking after a mass traumatic event. *Drug & Alcohol Dependence* 115: 1-8.

52 Fergusson DM, Horwood J, Boden JM, Mulder RT (2014) Impact of a Major Disaster on the Mental Health of a Well-Studied Cohort. *JAMA Psychiatry* 71: 1025-1031.

53 Galea S, Nandi A, Vlahov D (2005) The epidemiology of post-traumatic stress disorder after disasters. *Epidemiol Rev* 27: 78-91.

54 Gluckman P (2011) *The psychological consequences of the Canterbury earthquakes*. Wellington: Office of the Prime Minister's Science Advisory Committee.

55 Kessler RC, McLaughlin KA, Koenen KC, Petukhova M, Hill ED, et al. (2012) The importance of secondary trauma exposure for post-disaster mental disorder. *Epidemiology and Psychiatric Sciences* 21: 35-45.

56 Lock S, Rubin GJ, Murray V, Rogers MB, Amlot R, et al. (2012) Secondary stressors and extreme events and disasters: a systematic review of primary research from 2010-2011. *PLoS Curr* 4.

57 Kerdemelidis M, Reid MC. (2019) *Wellbeing recovery after mass shootings: information for the response to the Christchurch mosque attacks 2019. Rapid literature review.* Christchurch, New Zealand: Planning and Funding, Canterbury District Health Board.

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