Integrating Health Care Planning for Health and Prosperity in North Queensland

DATA SOURCES AND INFORMATION FOR THE NORTHERN QUEENSLAND HEALTH ATLAS - DRAFT NOT FOR FURTHER DISSEMINATION

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Abbreviations

ACPR	Aged Care Planning Region
ASR	Age-Standardised Rate
ASGS	Australian Statistical Geography Standard
FTE	Full-Time Equivalent
HHS	Hospital and Health Service
IRSD	Index of Relative Socio-economic Disadvantage
LGA	Local Government Area
PHN	Primary Health Network
PPH	Potentially Preventable Hospitalisations
SA2	Statistical Area Level 2
SA3	Statistical Area Level 3

Introduction

This *Integrating Health Care Planning for Health and Prosperity in North Queensland* project brings together key public and private health system partners across northern Queensland, including Hospital and Health Services, Primary Health Networks and the Community Controlled Health Sector to take a regional approach to strengthening the integration of care and place-based planning of workforce and service implementation in northern Queensland. The project builds on findings and recommendations made in the Health Service Delivery Situational Analysis that was informed by widespread stakeholder engagement across northern Australia and a comprehensive review of existing knowledge (1).

The project addresses the question: How do we best develop and implement processes for prioritising integrated place-based planning to the unique contexts of NQ? There are four main project phases:

(i) Development of an interactive map displaying various indicators of health and services across the project region using Geographic Information System (GIS) technology.
(ii) Identify gaps in service provision and integration in collaboration with place-based stakeholders in different operational contexts to identify priority communities to trial place-based planning processes, where more effective models of care or redistribution/integration of services to best meet need may be particularly beneficial
(iii) Design and pilot implementation of new models of care in collaboration with communities and partners.
(iv) Monitoring and evaluation of process, outcome and impact of place-based planning processes.

Northern Queensland Health Atlas

The Northern Queensland Health Atlas is an online interactive platform presenting population, health status, hospital utilisation, workforce, health care provision and service location data in map form (https://arcg.is/5a4Xq). The map has been developed by the project team to inform early place-based planning processes aimed at identifying imbalances between health services and need across northern Queensland.

The interactive map draws on publicly available datasets at the lowest geographic level possible and provides a foundation for understanding health need and service availability in the region. This companion document describes the data sources that have been used to build the Atlas.

Geography

Indicators have been displayed in the Northern Queensland Health Atlas using various levels of geography. Publicly available datasets for each indicator were appended to geographic boundary spatial files using a unique identifying field shared by the boundary file and indicator dataset. This section describes the boundary spatial files, how they were modified for this project and where they were sourced.

Aged Care Planning Region (ACPR)

Aged care services in Australia are funded and delivered in regions called Aged Care Planning Regions (ACPRs). There are 73 ACPRs across Australia. The 2018 ACPRs are based on Statistical Area Level 2 (SA2) boundaries from the Australian Bureau of Statistics Australian Geographic Standard (ASGS) 2016. The ACPR boundary used in the map is a derivative of the Department of Health ACPR maps. This derivative shows five ACPRs in the northern Queensland region as defined for the CRCNA Integrating Health Care Planning for Health and Prosperity in North Queensland research project: Central West, Far North, Mackay, North West and Northern.

Source of original boundary file:
Department of Health, Aged Care Planning Region Maps. Released January 2020. Available at Australian Institute of Health and Welfare GEN Aged Care Data: https://www.gen-agedcaredata.gov.au/Resources/Access-data/2020/January/Aged-Care-Planning-Region-Maps

Local Government Area (LGA)

The Local Government Area (LGA) spatial boundary file is a derivative of the Australian Bureau of Statistics 2018 Local Government Area structure (ESRI shapefile). This dataset shows Local Government Areas (LGAs) in the northern Queensland region as defined for the CRCNA Integrating Health Care Planning for Health and Prosperity in North Queensland research project. There is a total of 39 LGAs in the project region. This file was used for all data relating to LGA meaning that there may very slight issues with concordance of data with LGA based on the year. This issue is very limited to negligible in the project region.

Source of original boundary file:
Australian Bureau of Statistics. Australian Statistical Geography Standard (ASGS): Volume 3 - Non ABS Structures, July 2018 (Catalogue number 1270.0.55.003). Local Government Areas ASGS Ed 2018 Digital Boundaries in ESRI Shapefile Format. Available at:
https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1270.0.55.003Main+Features1July%202018?OpenDocument
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Hospital and Health Services (HHS)

The Hospital and Health Service (HHS) spatial boundary file used is a derivative of the Department of Health HHS boundary file. This derivative shows five HHS in the northern Queensland region as defined for the CRCNA Integrating Health Care Planning for Health and Prosperity in North Queensland research project: Cairns and Hinterland HHS, Mackay HHS. North West HHS, Torres and Cape HHS and Townsville HHS.

Source of original boundary file:
Department of Resources, Queensland boundaries. Published 6th January 2020. Queensland Spatial Catalogue. Available at https://qldspatial.information.qld.gov.au/catalogue/custom/search.page?q=%22Hospital%20and%20health%20service%20boundaries%20-%20Queensland%22.
The original material is licensed under a Creative Commons - Attribution 4.0 International licence. State of Queensland (Department of Resources) 2021

Primary Health Network (PHN)

The Primary Health Network (PHN) spatial boundary file is a derivative of the Department of Health ESRI Shapefile that originally defined the 31 Primary Health Network (PHN) boundaries (version May2017_V7). This dataset shows PHNs in the northern Queensland region as defined for the CRCNA Integrating Health Care Planning for Health and Prosperity in North Queensland research project: Western Queensland PHN and North Queensland PHN.

Source of original boundary file:
National Recovery and Resilience Agency, PHN Boundaries used by the NBRA. Published 16th March 2021. Available at the Australian Government Open Data Portal https://data.gov.au/data/dataset/phn-boundaries-used-by-the-nbra
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Statistical Area Level 2 (SA2)

The Statistical Area Level 2 (SA2) spatial boundary file used is a derivative of the is a derivative of the Australian Bureau of Statistics 2016 edition ESRI shapefile. This dataset shows SA2 units in the northern Queensland region as defined for the CRCNA Integrating Health Care Planning for Health and Prosperity in North Queensland research project. There is a total of 104 SA3s in the project region.

Source of original boundary file:
Australian Bureau of Statistics 2016 Australian Statistical Geography Standard (ASGS) Volume 1 - Main Structure and Greater Capital City Statistical Areas (cat no. 1270.0.55.001) edition of the SA2 ESRI shapefile. Available at:
https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1270.0.55.001July%202016?OpenDocument
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Statistical Area Level 3 (SA3)

The Statistical Area Level 3 (SA3) spatial boundary file used is a derivative of the is a derivative of the Australian Bureau of Statistics 2016 edition ESRI shapefile. This dataset shows SA3 units in the northern Queensland region as defined for the CRCNA Integrating Health Care Planning for Health and Prosperity in North Queensland research project. There is a total of 13 SA3s in the project region.

Source of original boundary file:
Australian Bureau of Statistics 2016 Australian Statistical Geography Standard (ASGS) Volume 1 - Main Structure and Greater Capital City Statistical Areas (cat no. 1270.0.55.001) edition of the SA3 ESRI shapefile. Available at:
https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1270.0.55.001July%202016?OpenDocument
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People and communities

Population

Estimated Resident Population 2020				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Total population	Count	SA2; LGA	Preliminary estimates of the resident population by age and sex as at 30 June 2020. The project team have calculated age groups and proportions of male/female directly from the datasets accessed. Females of reproductive age consist of females aged between 15 and 49 years. Notes: Data are provided by LGA for the 2020 edition of the Australian Statistical Geography Standard (ASGS) however are displayed on the map uses the 2018 edition.	Australian Bureau of Statistics (release 27 August 2021) Regional population by age and sex, 2020, ABS. - *Estimated resident population by age, Statistical Areas Level 2, Persons – 30 June 2020.* - *Estimated resident population by age, Local Government Areas, Persons – 30 June 2020.* Australian Bureau of Statistics (release 27 August 2021) Regional population by age and sex, 2020, ABS. - *Population estimates by age and sex – summary statistics by Statistical Area Level 2 and above, 2020* - *Population estimates by age and sex – summary statistics by Local Government Area, 2020* Available from https://www.abs.gov.au/statistics/people/population/regional-population-age-and-sex/2020#key-statistics.
Female population	Count; Proportion	SA2; LGA		
Male population				
0 to 14 years				
15 to 24 years				
25 to 44 years				
45 to 64 years				
65 years and over				
Females of reproductive age				
Median age	Age (years)	SA2; LGA		

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Aboriginal and Torres Strait Islander Population				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Australian Indigenous population 0 to 4 years	Count; %	LGA	Modelled estimates by PHIDU for resident Aboriginal and Torres Strait Islander population, based on SA2, IARE and IREG Estimated Resident Population and the ABS Census of Population and Housing, 2016. The dataset includes the estimated count of Aboriginal and Torres Strait Islander population for each indicator and the proportion of the total Aboriginal and Torres Strait Islander population. The project team have calculated broader age groups and females of reproductive age directly from the datasets accessed. Females of reproductive age consist of females aged between 15 and 49 years.	Aggregated age ranges and female population of reproductive age based on Public Health Information Development Unit (PHIDU), Torrens University Australia material from: Social Health Atlas of Australia: Data by Primary Health Network (incl. Local Government Areas) (online) 2021. Accessed 16th August 2021 [https://phidu.torrens.edu.au/social-health-atlases/data#social-health-atlases-of-australia-local-government-areas]. Other population indicators obtained without modification.
Australian Indigenous population 0 to 14 years				
Australian Indigenous population 15 to 24 years				
Australian Indigenous population 25 to 44 years				
Australian Indigenous population 45 to 64 years				
Australian Indigenous population 65 years and over				
Australian Indigenous population Females of reproductive age				

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Aboriginal and Torres Strait Islander population status	Count; %	LGA; SA2	The estimated proportion of population who identified as Aboriginal, Torres Strait Islander or Aboriginal and Torres Strait Islander in the 2016 Census is represented on the map.	Australian Bureau of Statistics, Estimates of Aboriginal and Torres Strait Islander Australians, June 2016, Released 13 September 2018. *Table 1. Estimated resident Aboriginal and Torres Strait Islander and Non-Indigenous populations, Local Government Areas, Australia.* *Table 3. Estimated Resident Aboriginal and Torres Strait Islander and Non-Indigenous populations, Statistical Areas Level 2, Queensland* Available from: https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/estimates-aboriginal-and-torres-strait-islander-australians/latest-release#data-download

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Estimated population change				
Indicator	**Measures**	**Geography**	**Description**	**Source**
2021 to 2026 Total population 2021 to 2026 0 to 4 years 2021 to 2026 65 years and over 2021 to 2026 Females of reproductive age 2021 to 2031 Total population 2021 to 2031 0 to 4 years 2021 to 2031 65 years and over 2021 to 2031 Females of reproductive age	Percent change	SA2; LGA	The projected percentage change in estimated resident population, as at 30 June 2018, is displayed on the map. The project team have calculated the population change in SA2 and LGA geographic units in the project region directly from the datasets accessed using the formula: % change = 100 x $\frac{Population_{future} - Population_{current}}{Population_{current}}$ Females of reproductive age consist of females aged between 15 and 49 years. *Note:* Data are based on geographical boundaries in the 2016 edition of the ASGS and 2016 Queensland LGAs. The map uses the 2018 edition for LGA.	Queensland Government population projections, 2018 edition; Australian Bureau of Statistics. Population by age and sex, regions of Australia, 2016 (Cat no. 3235.0). - *Projected population (medium series), by five–year age group (males, females and persons), by Statistical Area Level 2 (SA2), SA3 and SA4, Queensland, 2016 to 2041* - *Projected population (medium series), by five-year age group, persons, by Local Government Area, Queensland, 2016 to 2041.* Available from https://www.qgso.qld.gov.au/statistics/theme/population/population-projections/regions#current-release-qld-population-projections-region-reports-2018-edn.

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Fertility rate				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Fertility rate	Count; Fertility rate	SA2; LGA	The fertility rate is presented on the map. *Selected notes from the ABS:* Births are by the mother's usual place of residence and year of registration of birth. Fertility rate is the number of births per woman. Fertility rates are averaged using data for the three years ending in the reference year. They are calculated for each calendar year and then averaged.	Australian Bureau of Statistics, Births Australia 2020. Released 8th December 2021. *Table 2.3. Births, Summary, Statistical Areas Level 2, Queensland 2010-2020.* *Table 3.3. Births, Summary, Local Government Area, Queensland 2010-2020.* Available from https://www.abs.gov.au/statistics/people/population/births-australia/latest-release#data-download

Socio-economic characteristics

Highest level of school completed				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Year 8 or below Year 10 Year 12	Count; %	SA2; LGA	The highest level of school completed is represented on the map as the proportion of all those aged over 15 years who are no longer attending primary or secondary school; Census of Population and Housing 2016. *Note:* All data are for persons aged 15 years and over who are no longer attending primary or secondary school.	Australian Bureau of Statistics 2016 Census of Population and Housing: General Community Profile (Catalogue number 2001.0). *G16. Highest year of school completed by age by sex.* Accessed via Census DataPacks at https://datapacks.censusdata.abs.gov.au/datapacks/

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Homelessness				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Homeless persons	Count	SA2; LGA	The numbers of homeless people on Census night 2016 are displayed on the map. *Note:* Count is by place of enumeration. For information about interpretation of these data, see the ABS Census of Population and Housing: Estimating Homelessness report accessible at the source link.	Australian Bureau of Statistics. Census of Population and Housing: Estimating homelessness, 2016. Released 14 March 2018. (20490DO006_2016) - *All homeless persons by place enumeration, Statistical Area Level 2, 2016.* - *Estimating homelessness, 2016. All homeless persons by place enumeration, LGA, 2016.* Available from https://www.abs.gov.au/statistics/people/housing/census-population-and-housing-estimating-homelessness/2016#key-findings

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Socio-economic Index for Areas				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Index of Relative Socio-economic Disadvantage (IRSD)	Score; Percentiles	SA2; LGA	The IRSD scores are displayed on the map. The IRSD indicates geographic areas of relative disadvantage on a scale of most disadvantaged (lower score) to least disadvantaged (higher score). *Note:* Information about interpretation of these data are available in the ABS SEIFA 2016 Technical Paper accessible at the source link.	Australian Bureau of Statistics, Socio-economic Indexes for Australia (SEIFA), 2016. Released 27 March 2018. (Cat no. 2033.0.55.001) - *Statistical Area Level 2 Index of Relative Socio-economic Disadvantage, 2016.* - *Local Government Area Index of Relative Socio-economic Disadvantage, 2016*. Available from https://www.abs.gov.au/ausstats/abs@.nsf/mf/2033.0.55.001

Culturally and Linguistically Diverse Population				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Born overseas and report poor proficiency in English	Count; %	LGA	People aged 5 years and over who were born overseas and report poor proficiency in English are represented on the map as a proportion of the total population. *Note:* Poor proficiency is defined as speaking English 'not well' or 'not at all'.	Based on Public Health Information Development Unit (PHIDU), Torrens University Australia material from: Social Health Atlas of Australia: Data by Primary Health Network (incl. Local Government Areas) (online) 2021. Accessed 16th August 2021 at https://phidu.torrens.edu.au/social-health-atlases/data#social-health-atlases-of-australia-local-government-areas

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Health behaviours

Prevalence of specific health behaviours

Data on the prevalence of specific health behaviours, published by Queensland Health Queensland Survey Analytic System, are displayed on the map. This dataset is based on self-reported data through the Queensland Health Preventive Health Surveys. Each year, Queensland Health conducts telephone surveys with 12,500 adults and the parents of 2,500 children aged 5 through 17 years. Surveys focus on key preventive health indicators such as obesity, adult smoking, physical activity, nutrition, sunburn and sun protection, and adult alcohol consumption. Modelled prevalence estimates for 2019/2020 years pooled are displayed unmodified in these layers of the map.

Note: Further details about the survey and methods used are available at https://www.health.qld.gov.au/research-reports/population-health/preventive-health-surveys/about#documentation. In some areas, contiguous LGAs were combined to achieve sufficient numbers of participants for reporting. An aggregated area in the project region is labelled as *Combined LGAs in North West HHS* and consists of Burke (S), Carpentaria (S), Cloncurry (S), Doomadgee (S), McKinlay (S), Mornington (S) LGAs.

Indicator	Measures	Geography	Description	Source
Daily smoking	Count; %	LGA	Smoking, daily smoker, persons aged 18+	Queensland Health. Queensland survey analytic system (QSAS), Detailed regional LGA data, accessed 3rd August 2021. Available from: www.health.qld.gov.au/phsurvey *Note:* "Results from the Queensland adult child preventive health survey were sourced from the Queensland survey analytic system (www.health.qld.gov.au/phsurvey). Reproduction and interpretation of these results was solely the responsibility of the authors and may not reflect the views of the Queensland Department of Health. Official Queensland statistics are based on annual data whereas regional statistics are based on two combined (pooled) annual surveys. For regional comparisons, comparable state level pooled results were used - these will differ from current official Queensland statistics (available from www.health.qld.gov.au/phsurvey)."
Sufficient fruit intake	Count; %	LGA	Nutrition, sufficient daily fruit intake, persons aged 18+	
Sufficient vegetable intake	Count; %	LGA	Nutrition, Sufficient daily vegetable intake, persons aged 18+	
Sufficient physical activity	Count; %	LGA	Physical Activity, Sufficient weekly activity, persons aged 18+	
Risky lifetime drinking	Count; %	LGA	Alcohol, risky lifetime drinking, persons aged 18+	
Overweight and obesity	Count; %	LGA	BMI, Overweight/Obese, persons aged 18+	
Poor to fair self-rated health	Count; %	LGA	Health and wellbeing, Fair/poor self-rated health, persons aged 18+	

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Participation in cancer screening				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Bowel cancer screening participation	Count; %	SA2	The participation rates of people aged 50 to 74 years in the National Bowel Cancer Screening Program are displayed in the map. Data are for 2017-2018. *Notes:* This indicator measures a 2-year invitation period and excludes those who opted off or suspended participation. Excluded SA2s: Lamb Range, Wooroonooran, Mackay Harbour, Cape Conway, Aurukun, Palm Island. Further information is available at https://www.aihw.gov.au/reports/cancer-screening/national-cancer-screening-programs-participation/contents/about	AIHW analysis of National Cancer Screening Register data (NCSR RDE 23/02/2021). Australian Institute of Health and Welfare. Cancer screening programs: quarterly data. Table 6. Table 6: Participation in the National Bowel Cancer Screening Program by SA2, people aged 50–74, 2015–2016 to 2017–2018. Released June 2021. Available from https://www.aihw.gov.au/reports/cancer-screening/national-cancer-screening-programs-participation/contents/national-bowel-cancer-screening-program
Breast cancer screening participation	Count; %	SA3	The participation rates of people aged 50 to 74 years in the BreastScreen Australia program are displayed on the map. Data are for the two period 2018/2019. Participation rate refers to the proportion of women aged 50–74 who are screened in a 2-year period. *Notes:* Cairns-North not published because of small numbers, confidentiality or other concerns about the quality of the data. Data for 2018–2019 are preliminary and subject to change. Further information is available at https://www.aihw.gov.au/reports/cancer-screening/national-cancer-screening-programs-participation/contents/about	AIHW analysis of state and territory BreastScreen register data. Australian Institute of Health and Welfare. Cancer screening programs: quarterly data. Table 12a. Participation in the BreastScreen Australia by SA3 and age group, 2016-17 to 2018-19. Released June 2021. Available from https://www.aihw.gov.au/reports/cancer-screening/national-cancer-screening-programs-participation/contents/breastscreen-australia

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Participation in cancer screening				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Cervical cancer screening participation	Count; %	SA3	The participation rates of females aged 25 to 74 years in the National Cervical Screening Program are displayed on the map. Data are for 2018-2019. *Notes:* Cairns-North not published because of small numbers, confidentiality or other concerns about the quality of the data. These data are considered preliminary and subject to change. Further information is available at https://www.aihw.gov.au/reports/cancer-screening/national-cancer-screening-programs-participation/contents/about	AIHW analysis of National Cancer Screening Register data (NCSR RDE 25/09/2020). Australian Institute of Health and Welfare. Cancer screening programs: quarterly data. Table 16a: Participation in the National Cervical Screening Program by SA3 and age group, 2018–2019. Released June 2021. Available from https://www.aihw.gov.au/reports/cancer-screening/national-cancer-screening-programs-participation/contents/national-cervical-screening-program

Childhood immunisation coverage				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Children who have had all vaccines recommended for their age (12 to 15 months)	%	SA3	Quarterly data on childhood immunisation coverage, available from the Australian Department of Health, are displayed on the map. The data shows annualised data on the percentage of children fully immunised, according to the National Immunisation Program Schedule, at age 12 months, 24 months and 60 months.	Australian Department of Health. Australian Immunisation Register - Coverage Report, QLD childhood immunisation coverage data by SA3 September 2021 annualised data – all children. Downloaded 19th January 2022. Available from https://www.health.gov.au/resourc
Children who have had all vaccines recommended for their age (24 - 27 months)				

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Childhood immunisation coverage				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Children who have had all vaccines recommended for their age (60 to 63 months)			Immunisation coverage is the percentage of children who have had all the recommended vaccines for their age. In Australia, the national aspirational target is 95% coverage. *Notes:* Rolling four quarters of coverage data: December 2020, March 2021, June 2021 and September 2021 (01 October 2020 - 30 September 2021).	es/publications/qld-childhood-immunisation-coverage-data-by-sa3

Smoking during pregnancy				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Smoking during pregnancy	Count; %	HHS	The proportion of pregnant females who report tobacco smoking at any time during pregnancy is displayed on the map. *Notes:* Smoking during pregnancy refers to self-reported smoking at any point in the pregnancy. Pregnant females with unknown smoking status (average n=21 per year for all HHS combined) were excluded in the denominator. HHS relates to the HHS of usual residence.	Statistical Reporting and Coordination, Statistical Services Branch, Queensland Health. Table 9) Total mothers by calendar year, HHS of mother's usual residence and mother's smoking status (at any time during pregnancy), for mothers who are usual residents in Torres & Cape, Cairns and Hinterland, North West, Townsville or Mackay HHSs, 2010-2020 p. Unpublished data provided at request. Created 3rd November 2021. Data are sourced from the Queensland Perinatal Data Collection (QPDC). "The data within this file must only be used by the recipient for activities directly related to details of this request. Any further or subsequent use of the information for other purposes must be further authorised by Statistical Reporting and Coordination"

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Antenatal visits				
Indicator	**Measures**	**Geography**	**Description**	**Source**
8 or more antenatal visits	Count; %	HHS	The proportion of pregnant females who attended 8 or more antenatal care visits is displayed on the map. *Notes*: Pregnant females with unknown antenatal visits (average n=9 per year for all HHS combined) were excluded in the denominator. HHS relates to the HHS of usual residence.	Statistical Reporting and Coordination, Statistical Services Branch, Queensland Health. Table 10) Total mothers by calendar year, HHS of mother's usual residence and total antenatal visits, for mothers who are usual residents in Torres & Cape, Cairns and Hinterland, North West, Townsville or Mackay HHSs, 2010-2020 p. Unpublished data provided at request. Created 3rd November 2021. Data are sourced from the Queensland Perinatal Data Collection (QPDC). "The data within this file must only be used by the recipient for activities directly related to details of this request. Any further or subsequent use of the information for other purposes must be further authorised by Statistical Reporting and Coordination."

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Health status

Notifiable conditions				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Rheumatic Heart Disease Hepatitis B Hepatitis C Pneumococcal Infectious syphilis Tuberculosis	Count; crude rate	HHS	The annual reported number of cases of specific notifiable conditions per 10,000 population (crude rate) are displayed on the map. *Selected notes from data source:* All data are reported by date of disease onset. RHD notifications are reported by the date notified to the Queensland Department of Health. Annual data refers to all notifications from the start of the year up to and including the most recent Sunday. Reporting by HHS is based on the address and postcode of residence of notified cases. It is therefore a Queensland Department of Health organisational boundary that describes the number of cases reported in specific regions of Queensland. The postcode of residence of the case does not necessarily reflect where the infection was acquired. Numbers of cases reported at different regional levels should therefore be interpreted with caution. For more information, see https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/surveillance/reports/notifiable/technical-notes The population for each HHS has been obtained from the Queensland Chief Health Officer Report 2020.	Source for notifiable conditions data: Queensland Health. Notifiable conditions annual reporting. Queensland Government. Dashboard accessed on 16 September 2021. Available at https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/surveillance/reports/notifiable/annual Source for population data: Queensland Health. The Health of Queenslanders 2020. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2020. Released November 2020. Available from https://www.health.qld.gov.au/research-reports/reports/public-health/cho-report/current/data

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Incidence of cancer				
Indicator	**Measures**	**Geography**	**Description**	**Source**
All cancers	Count; Crude rate; Age-standardised rate	HHS	The incidence of specific cancers is represented on the map as an age-standardised rate. *Notes:* The incidence of cancer cases is the average number of incident cases per year (2015-2017). The ASR is the age standardised rate (per 100,000 persons) standardised to Australian population 2001.	Queensland Health. The Health of Queenslanders 2020. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2020. Released November 2020. Available from https://www.health.qld.gov.au/research-reports/reports/public-health/cho-report/current/data. Data for the Chief Health Officer report are sourced from the Queensland Cancer Control Analysis Team (QCCAT) https://cancerallianceqld.health.qld.gov.au/queensland-cancer-statistics/
Breast cancer				
Prostate cancer				
Melanoma				
Colorectal cancer				
Lung cancer				
Cervical cancer				

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Prevalence of certain conditions				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Diabetes mellitus	Count; %	SA2	Modelled small area estimates published by the Australian Bureau of Statistics on the prevalence of diabetes mellitus, asthma and three or more chronic conditions are displayed on the map. Estimates of the prevalence are based on self-reported data in the National Health Survey (2017/2018). For more information, see https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release#about-the-national-health-survey. *Selected notes from the Australian Bureau of Statistics:* SA2s with the following criteria were excluded from the modelled estimates: - SA2s with more than 20% of their population classified as very remote or discrete Aboriginal and Torres Strait Islander communities; - SA2s with an adjusted ERP of zero residents; - SA2s with zero usual residents in the 2016 Census	Australian Bureau of Statistics. National Health Survey: Small Area Estimates, 2017–18 — Australia: Table 33.2 Diabetes mellitus by selected age groups. Released 17th April 2020. Downloaded 29th August 2021. Available from https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-releas
Asthma				
Three or more chronic conditions				

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Prevalence of certain conditions				
All types of diabetes (NDSS)	Count; %	LGA	The estimated prevalence of diabetes (all types aggregated) available from Diabetes Australia is displayed on the map. The data displayed show the proportion of people (in an LGA) with diabetes registered on the NDSS as at 31st December 2021. Type 1, Type 2, Gestational and other types of diabetes are included in the count. This data gives an indication of the prevalence of diabetes in the region. The data are derived from the Registrant database of the Australian Government initiative - the National Diabetes Services Scheme (NDSS) initiated in 1987. The NDSS subsidises the supply of diabetes-related services and products to people who are registered with the scheme. Registration with the scheme requires certification of a diagnosis of diabetes from a doctor, nurse or credentialed diabetes educator. *Selected notes from Diabetes Australia:* Data suppression rules have been applied to manage the risk of identifying an individual person with diabetes by using the Diabetes Map. The count/percentage of NDSS registrants are not available if: The count of registrants for the selected data view and area is 20 or less, OR; The population of the selected area is less than 100. Additionally, all counts of registrants are rounded to the nearest 10 to prevent the derivation of small counts from remaining counts. The map reflects diabetes prevalence rates at the national, federal, state electorate, local government, primary health network, and postcode levels based on NDSS data and ABS 2016 Census population projections.	Diabetes Australia. Australian Diabetes Map. Accessed on 2nd February 2022. Available from https://www.ndss.com.au/about-the-ndss/diabetes-facts-and-figures/australian-diabetes-map/

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Mortality				
Indicator	**Measures**	**Geography**	**Description**	**Source**
All cause mortality	Count; Crude rate; Age-standardised rate; Median age	LGA	The crude rate of all causes mortality for the year 2019 (year of registration of death), published by the Australian Institute of Health Welfare, are displayed on the map. *Selected notes from AIHW:* LGA relates to area of usual residence. Death data are not presented for LGAs with less than 20 deaths in a single year. Age-standardised rate (per 100,000): Age-standardised rates are directly standardised to the Australian estimated resident population at 30 June 2001. Rates are expressed as deaths per 100,000 persons for each geographic area. Crude rate (per 100,000): Number of deaths due to all causes per 100,000 population. Rates are calculated using the estimated resident population at 30 June for each year. Rates are expressed as deaths per 100,000 persons for each geographic area. Median age at death (years): The age at which exactly half the deaths are deaths of people above that age and half are deaths below that age. Median age at death is calculated based on the age at death in single years. Infants (aged under 1) are treated as aged 0 years. For more information see https://www.aihw.gov.au/reports/life-expectancy-death/mort-books/contents/about	AIHW (Australian Institute of Health and Welfare) 2021. MORT (Mortality Over Regions and Time) books: Local Government Area (LGA), 2015–2019. Table 1: All cause deaths by sex and year, 2015-2019. Canberra: AIHW. Available from https://www.aihw.gov.au/reports/life-expectancy-death/mort-books/contents/mort-books Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database.

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Mortality				
Potentially avoidable deaths	Count; %; Age-standardised rate	LGA	Potentially avoidable deaths are represented on the map as a proportion of all premature deaths. Data are for all causes mortality for the year 2019 (year of registration of death). *Selected notes from the data source (AIHW):* LGA relates to area of usual residence. Death data are not presented for LGA with less than 20 deaths in a single year. Potentially avoidable deaths (PAD): Measure of health system performance. Deaths among people aged under 75 that are avoidable in the context of the present health care system. PADs include deaths from conditions that are potentially preventable through individualised care and/or treatable through existing primary or hospital care. PADs are classified using nationally agreed definitions (AIHW 2021. National Healthcare Agreement: PI 16–Potentially avoidable deaths, 2021. Viewed 1 April 2021, <https://meteor.aihw.gov.au/content/index.phtml/itemId/725797>). PAD (% of premature deaths): Potentially avoidable deaths as a proportion of all premature deaths. PAD age-standardised rate (per 100,000): Number of potentially avoidable deaths due to all causes per 100,000 population aged under 75. Age-standardised rates are directly standardised to the Australian estimated resident population at 30 June 2001. Rates are expressed as deaths per 100,000 persons aged under 75 for each geographic area. For more information see https://www.aihw.gov.au/reports/life-expectancy-death/mort-books/contents/data-visualisation	AIHW (Australian Institute of Health and Welfare) 2021. MORT (Mortality Over Regions and Time) books: Local Government Area (LGA), 2015–2019. Table 1: All cause deaths by sex and year, 2015-2019. Canberra: AIHW. Available from https://www.aihw.gov.au/reports/life-expectancy-death/mort-books/contents/mort-books Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database.

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Mortality				
Potential Years of Life Lost (Under 75 rate)	Person-Years; Crude rate	LGA	Potential Years of Life Lost (PYLL) are represented on the map as a rate in person-years per 1,000 people. Data are for all causes mortality for the year 2019 (year of registration of death). *Selected notes from the data source (AIHW):* Summary measure of premature deaths. PYLL represents the total number of years not lived by an individual before an arbitrary upper limit to life, in this workbook age 75. For example, if dying before the age of 75 is considered premature then a person dying at age 40 would have lost 35 person-years of potential life lost. PYLL under 75 rate (per 1,000): Rates are calculated using the sum of estimated resident populations at 30 June for 2019. Rates are expressed as person-years per 1,000 persons for each geographic area.	AIHW (Australian Institute of Health and Welfare) 2021. MORT (Mortality Over Regions and Time) books: Local Government Area (LGA), 2015–2019. Table 1: All cause deaths by sex and year, 2015-2019. Canberra: AIHW. Available from https://www.aihw.gov.au/reports/life-expectancy-death/mort-books/contents/mort-books Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database.

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Mortality				
Suicide	Count; Age-standardised rate	SA3	Suicide rates for the period 2016-2020, available from the Australian Institute of Health and Welfare, are represented on the map as age-standardised rates. *Selected notes from AIHW:* Age-standardised rates are per 100,000 population. Statistical Area Level 3 data relate to place of usual residence. Deaths are counted according to year of registration of death, not necessarily the year in which the death occurred and have been summed for the 5 year period; 2016 to 2020. For more information see https://www.aihw.gov.au/suicide-self-harm-monitoring	Australian Institute of Health and Welfare. Suicide and self-harm monitoring. National mortality database - Suicide (ICD-10 X60-X64, Y87.0). Table NMD S11: Age-standardised suicide rate by year of registration of death, Statistical Area 3, 2016-2020. Available from https://www.aihw.gov.au/suicide-self-harm-monitoring/data/suicide-self-harm-monitoring-data. Deaths data are from AIHW National Mortality Database and from the Australian Bureau of Statistics (Causes of Death, Australia, 2020). Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database.

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Self-harm				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Intentional self-harm hospitalisations - females Intentional self-harm hospitalisations - males	Count; Crude rate	SA3	Crude rates of hospitalisation of males and females for intentional self-harm, available from the Australian Institute of Health and Welfare, are displayed on the map. *Selected notes from AIHW:* Statistical Area Level 3 data relate to place of usual residence. All data for an area were suppressed (marked n.p.) if the number of hospitalisations was less than 5, percentages where n<5, crude rate where the numerator was <10 or denominator was less than 100, or where the numerator was <20 or denominator of any age group was <30 when reporting age-standardised rates. Consequential suppression was applied to manage confidentiality, which is the process of suppressing information which, whilst not necessarily confidential, may be used to derive confidential data. Rates based on low numbers of events and/or very small populations are more susceptible to random fluctuations and therefore may not provide a reliable representation of activity in that area. For this reason, results for some areas were suppressed. Rates (hospitalisations per 100,000 population) were not reported if the number of hospitalisations in an area was less than 20 or the population of an age group in an area was less than 2,500. For more information see https://www.aihw.gov.au/suicide-self-harm-monitoring	Australian Institute of Health and Welfare. Suicide and self-harm monitoring. National mortality database - Suicide (ICD-10 X60-X64, Y87.0). Table NHMD S9: Intentional self-harm hospitalisations, by Statistical Area 3 (SA3) and sex, 2019–20. Available from https://www.aihw.gov.au/suicide-self-harm-monitoring/data/suicide-self-harm-monitoring-data Data on hospital separations are sourced from the National Hospital Morbidity Database (NHMD) held by the AIHW.

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Perinatal				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Pre-term births	Count; %	HHS	The proportion of pre-term births (less than 37 weeks gestation) is displayed on the map.	Statistical Reporting and Coordination, Statistical Services Branch, Queensland Health. Unpublished data provided at request. Created 3rd November 2021. - *Table 11) Total births by calendar year, HHS of mother's usual residence and gestation, for mothers who are usual residents in Torres & Cape, Cairns and Hinterland, North West, Townsville or Mackay HHSs, 2010-2020 p.* - *Table 12) Total births by calendar year, HHS of mother's usual residence and birthweight, for mothers who are usual residents in Torres & Cape, Cairns and Hinterland, North West, Townsville or Mackay HHSs, 2010-2020 p.* "The data within this file must only be used by the recipient for activities directly related to details of this request. Any further or subsequent use of the information for other purposes must be further authorised by Statistical Reporting and Coordination." Data are sourced from the Queensland Perinatal Data Collection (QPDC).
High birthweight			The proportion of births with a high birthweight (4,500g or more) is displayed on the map. NOTES: Births with unknown weight (average n=2 per year for all HHS combined) were excluded in the denominator (total births). HHS relates to the HHS of mother's usual residence.	
Low birthweight			The proportion of births with a low birthweight (<2,500g) is displayed on the map. NOTES: Births with unknown weight (average n=2 per year for all HHS combined) were excluded in the denominator (total births). HHS relates to the HHS of mother's usual residence.	

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Health Workforce

Aboriginal and Torres Strait Islander Workforce				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Aboriginal and Torres Strait Islander Practitioners	Count; FTE	LGA; SA3	Aboriginal and Torres Strait Islander Practitioners, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map as Count and FTE. *Notes:* Aboriginal and Torres Strait Islander Health Practitioners are registered healthcare practitioners who provide clinical services and patient care with a focus on culturally safe practice for Aboriginal and Torres Strait Islander people. They work collaboratively within multidisciplinary healthcare teams to achieve better health outcomes for Aboriginal and Torres Strait Islander people and communities, and play a key role in facilitating relationships between Aboriginal and Torres Strait Islander patients and other health practitioners. To gain registration, practitioners must complete a minimum 12-month Certificate IV program of study approved by the Aboriginal and Torres Strait Islander Health Practice Board of Australia. (Department of Health https://hwd.health.gov.au/resources/publications/factsheet-alld-atsi-health-practitioners-2019.pdf) Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Aboriginal and Torres Strait Islander Practitioner (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE

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Aboriginal and Torres Strait Islander Workforce				
Clinicians identifying as Aboriginal and Torres Strait Islander	Count; FTE	LGA; SA3	Health professionals who identified as Aboriginal and Torres Strait Islander, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map as Count. Health professionals include: Aboriginal and Torres Strait Islander Health Practitioners, Dental Practitioners, Medical Practitioners, Medical Radiation Practitioners, Nurses and Midwives, Occupational Therapists, Optometrists, Pharmacists, Physiotherapists, Podiatrists, Paramedicine Practitioners and Psychologists. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset.	Workforce data: National Health Workforce Dataset, Practitioners who identified as Aboriginal and Torres Strait Islander as defined by 'Indigenous and Australian born' (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE

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Dentists

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-dentists-2019.pdf) Dentists are registered healthcare practitioners who may practise all parts of dentistry within their competency and training. They provide assessment, diagnosis, treatment, management and preventive services to patients of all ages. To gain registration as a dentist, a practitioner must complete a minimum four year undergraduate, or four year postgraduate master program of study approved by the Dental Board of Australia. Further training is required for specialisation.

Indicator	Measures	Geography	Description	Source
Dentists	Count; FTE; FTE/10,000	LGA; SA3	Dentists, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Dentists (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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General practitioners				
Indicator	**Measures**	**Geography**	**Description**	**Source**
General practitioners	Count; FTE; FTE/10,000	LGA; SA3	General Practitioners, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. The data include Vocational and Non-Vocational General Practitioners. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, General practitioner (employed in Australia and working in registered profession; Clinician) Vocational and Non Vocational as defined by "Job Area" ; 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Medical Radiation Practitioners

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-medical-radiation-2019.pdf):
Medical radiation practitioners are registered healthcare practitioners who perform diagnostic imaging studies on patients, plan and administer radiation treatments, or prepare and administer nuclear medicine.
There are three divisions of practice for medical radiation practitioners: nuclear medicine technology, radiation therapy and diagnostic radiography.
To gain registration, medical radiation practitioners must complete a minimum three-year undergraduate, or two-year postgraduate Master program of study approved by the Medical Radiation Practice Board of Australia.

Indicator	Measures	Geography	Description	Source
Medical radiation practitioners	Count; FTE; FTE/10,000	LGA; SA3	Medical Radiation Practitioners, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Medical Radiation Practitioner (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Nurses

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-nrmw-2019.html)
All nurses and midwives must be registered with the Nursing and Midwifery Board of Australia (NMBA) and meet the NMBA's registration standards in order to practise in Australia. There are three divisions of registration: Registered Nurse (RN), Midwife and Enrolled Nurse (EN).
Eligible practitioners may register in one or multiple divisions. Those who are registered as both a nurse and midwife are considered to hold dual registration.

Indicator	Measures	Geography	Description	Source
Nurses and midwives	Count; FTE; FTE/10,000	LGA; SA3	Nurses and midwives, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Nurses and midwives (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download
Midwifery workforce	Count; FTE; FTE/10,000	LGA; SA3	Midwifery workforce, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Midwifery workforce consists of data for 'Registered Nurse and Midwife' plus 'Midwife only'. Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Midwifery workforce (employed in Australia and working in registered profession; 'Registered Nurse and Midwife' plus 'Midwife only'; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Occupational Therapists

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-occupational-therapists-2019.pdf)
Occupational therapists are registered health practitioners who work with people to improve their health and wellbeing, with a focus on physical and mental health that may be related to a person's injury or illness, or to an accident or developmental impairment. The primary goal of occupational therapy is to enable people to participate in everyday life. To gain registration as an occupational therapist, practitioners must complete a minimum four-year undergraduate, or two-year postgraduate Master program of study approved by the Occupational Therapy Board of Australia

Indicator	Measures	Geography	Description	Source
Occupational therapists	Count; FTE; FTE/10,000	LGA; SA3	Occupational Therapists, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Occupational Therapists (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Optometrists

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-optometrists-2019.pdf)

Optometrists are registered healthcare practitioners trained to diagnose vision problems, prescribe optical appliances, and treat a range of eye conditions. To gain registration as an optometrist, practitioners must complete a five year undergraduate, a five year combined undergraduate/Masters (or 3.5 year accelerated program), or a four-year Master program of study approved by the Optometry Board of Australia.

Indicator	Measures	Geography	Description	Source
Optometrists	Count; FTE; FTE/10,000	LGA; SA3	Optometrists, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Optometrists (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Paramedicine Practitioners

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-paramedical-2019.pdf)

Paramedics are registered health practitioners who provide emergency or unscheduled care to acutely ill or injured persons, predominantly in an out of hospital or primary care environment. This may involve autonomous practice, complex patient assessments and delivery of treatment which may include the administration of scheduled medicines.

To gain registration as paramedic, practitioners must either:

1. complete a minimum three year bachelor degree or 1 year graduate diploma approved by the Board;
2. hold a qualification issued by the Ambulance Service of New South Wales and accepted by the Board;
3. hold a qualification the Board considered to be substantially equivalent to those it has approved; or
4. satisfy one of the following three time-limited 'grandparenting' pathways described in the National Law and assessed by the Board:

a. hold a qualification or have completed training that the Board considers adequate;

b. hold a qualification or have completed training in paramedicine and have also completed further study, training or supervised practice required by the Board;

c. have completed five years of practice over the past 10 years and satisfy the Board that you are competent to practise paramedicine

Indicator	Measures	Geography	Description	Source
Paramedicine practitioners	Count; FTE; FTE/10,000	LGA; SA3	Paramedicine Practitioners, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Paramedicine Practitioners (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Pharmacists

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-pharmacists-2019.pdf)
Pharmacists are registered healthcare practitioners who prepare and dispense medicines, consult with patients and other practitioners on drug selection and administration, and work in the research, development and manufacture of medicines. In a community setting, pharmacists also advise patients on over the counter medicines and medical aids (such as blood glucose monitoring equipment). To gain registration as a pharmacist, practitioners must complete must complete a minimum four-year undergraduate, or two-year postgraduate Master program of study approved by the Pharmacy Board of Australia.

Indicator	Measures	Geography	Description	Source
Pharmacists	Count; FTE; FTE/10,000	LGA; SA3	Pharmacists, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Pharmacists (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Physiotherapists

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-physiotherapists-2019.pdf)

Physiotherapists are registered healthcare practitioners whose focus is on structure and movement of the human body. They work with people of all ages to improve physical mobility and movement related to sports injuries, general musculoskeletal conditions neurological and respiratory conditions. They work across the spectrum from health prevention, acute and rehabilitation. To gain registration as a physiotherapist, practitioners must complete a minimum four-year undergraduate or two-year postgraduate Master program of study approved by the Physiotherapy Board of Australia.

Indicator	Measures	Geography	Description	Source
Physiotherapists	Count; FTE; FTE/10,000	LGA; SA3	Physiotherapists, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Physiotherapists (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Podiatrists

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-podiatrists-2019.pdf)

Podiatrists are registered healthcare practitioners trained to assess, diagnose and treat foot, ankle, and lower limb problems. Podiatrists treat biomechanical, pain related, and skin conditions as well as assisting in the management of chronic conditions such as poor circulation, and conditions affecting toenails.

To gain registration as a podiatrist, practitioners must complete a minimum three year undergraduate or two-year postgraduate Master program of study approved by the Podiatry Board of Australia. Further training is required for the registration in the specialty of podiatric surgery.

Indicator	Measures	Geography	Description	Source
Podiatrists	Count; FTE; FTE/10,000	LGA; SA3	Podiatrists, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Podiatrists (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Psychologists

Definition as per Australian Government Department of Health Fact Sheet (https://hwd.health.gov.au/resources/publications/factsheet-alld-psychologists-2019.pdf)

Psychologists are registered healthcare practitioners trained in human behaviour and study the brain, memory, learning and processes around human development. Psychological treatments can be used to help individuals, families, groups and organisations.

To gain general registration as a psychologist, practitioners must complete a minimum four year program of study approved by the Psychology Board of Australia, followed by two years of further Board approved postgraduate study, supervised practice program and/or internship. Generally registered psychologists can then choose to complete a registrar program leading to an area of practice endorsement.

Indicator	Measures	Geography	Description	Source
Psychologists	Count; FTE; FTE/10,000	LGA; SA3	Psychologists, who were employed in Australia and working in their registered profession as clinicians in 2020, are represented on the map by Count and FTE/10,000 population. *Notes:* Data for Mapoon (S) is not available in the National Health Workforce Dataset. Additionally, data have been suppressed (in the original dataset) for counts or FTE equivalent to 3 or less.	Workforce data: National Health Workforce Dataset, Psychologists (employed in Australia and working in registered profession; Clinician); 2013-2020, downloaded on 17 November 2021 at https://hwd.health.gov.au/datatool/. - LGA 2018 by year, Count and FTE - ASGS 2016 SA3 by year, Count and FTE Estimated resident population: Australian Bureau of Statistics. Population estimates, 2001 to 2020, in GeoPackage. Available from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download

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Health Service Delivery and Utilisation

Facilities		
Indicator	**Description**	**Source**
Public health facilities and private hospitals	This dataset was compiled by the JCU project team. The dataset shows public health services classified using the rural and remote health service framework. Urban based public health facilities are not included in the framework but are included with this dataset using terminology deemed appropriate by the project team. Private hospitals are also included with the dataset. *Notes:* Information about each facility has been appended to the location data. This data is current as of 22nd December 2021. Some data are updated at regular intervals. Clinical Services Capability Framework level for the maternity module has been extracted from the most recent self-assessment summaries available for each Hospital and Health Service. For information about Hospital Performance data variables, refer to the Queensland Health Hospital Performance website at http://www.performance.health.qld.gov.au/.	***Multiple sources were used for the location data:*** Australian Institute of Health and Welfare. MyHospitals mapping details. Data as of: August 17, 2021, version: 2021081701. Available at https://www.aihw.gov.au/reports-data/myhospitals/content/data-downloads Queensland Health. National Health Services DirectoryMap of rural and remote health facilities. Accessed 22nd December 2021. Available at https://www.aihw.gov.au/reports-data/myhospitals/content/data-downloads Healthmap. National Health Services Directory - General Dental Practice. Accessed between 10th and 22nd December 2021. Available at https://healthmap.com.au/ Hospital and Health Service websites in the project region Cairns and Hinterland Hospital and Health Service. Hospitals and health centres. Accessed 22 December 2022. Available at https://cairns-hinterland.health.qld.gov.au/hospitals-and-health-centres Mackay Hospital and Health Service. Your Hospitals. Accessed 22 December 2022. Available at https://www.mackay.health.qld.gov.au/your-hospitals/ North West Hospital and Health Service. Our Facilities Accessed 22 December 2022. Available at https://www.northwest.health.qld.gov.au/our-facilities/ Torres and Cape Hospital and Health Service. Home Page. Accessed 22 December 2022. Available at https://www.health.qld.gov.au/torres-cape Townsville Hospital and Health Service. Townsville Health Services. Accessed 22 December 2022. Available at https://www.townsville.health.qld.gov.au/facilities/townsville/ Central West Health. Locations and Services. Accessed 22 December 2022. Available at https://www.health.qld.gov.au/centralwest/menu/locations-and-services/boulia ***Source for clinical and specialised services:*** Queensland Government. Inform my care. Accessed between 10th and 22nd December 2021. Available at https://www.informmycare.health.qld.gov.au/hospital

Facilities		
Indicator	**Description**	**Source**
Primary health care services	This dataset was compiled by the JCU project team. The dataset includes the location of services providing general primary health care services in the project region. Private, ACCHO and public general practice services are included.	***Source for numbers of staff:*** Queensland Health (2021). Hospital Performance: Hospitals - Staffing information for end of September 2021. Queensland Government. Accessed 22nd December. Available at http://www.performance.health.qld.gov.au/. *Source for Maternity CSCF level:* Queensland Health. CSCF public hospitals. Cairns and Hinterland Hospital and Health Service Self-assessment summary. July 2019. Accessed 1st January 2022. Available at https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/service-delivery/cscf/hospitals/public Queensland Health. CSCF public hospitals. Mackay Hospital and Health Service Self-assessment summary. July 2017. Accessed 1st January 2022. Available at https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/service-delivery/cscf/hospitals/public Queensland Health. CSCF public hospitals. North West Hospital and Health Service Self-assessment summary. September 2015. Accessed 1st January 2022. Available at https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/service-delivery/cscf/hospitals/public Queensland Health. CSCF public hospitals. Torres and Cape Hospital and Health Service Self-assessment summary. April 2018. Accessed 1st January 2022. Available at https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/service-delivery/cscf/hospitals/public Queensland Health. CSCF public hospitals. Townsville Hospital and Health Service Self-assessment summary. August 2017. Accessed 1st January 2022. Available at https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/service-delivery/cscf/hospitals/public Central West Health. Locations and Services. Accessed 22 December 2022. Available at https://www.health.qld.gov.au/centralwest/menu/locations-and-services/boulia
Private general practice	This dataset was compiled by the JCU project team. The dataset includes the location of private general practice services in the project region.	Multiple sources were used for the location data: Healthmap. National Health Services Directory - General Dental Practice. Accessed between 10th and 22nd December 2021. Available at https://healthmap.com.au/ An internal dataset and the Yellow Pages were used to supplement the Healthmap dataset.

Facilities		
Indicator	**Description**	**Source**
Aboriginal and Torres Strait Islander Health Services	This dataset was compiled by the JCU project team. The dataset shows the locations for Aboriginal Community Controlled Health Organisations (ACCHO) in the project region.	Location data were sourced from the websites of ACCHOs in the project regions: Apunipima Cape York Health Council https://www.apunipima.org.au/community-controlled-health-service/ ATSICHS Mackay https://www.atsichsmackay.org/ Gidgee Healing https://gidgeehealing.com/ Girudala Community Cooperative Society Ltd http://girudala.com.au/ Gurriny Yealamucka Health Services https://www.gyhsac.org.au/ Mamu Health Service Limited https://mamuhsl.org.au/ Mudth-Niyleta Aboriginal and Torres Strait Islander Corporation https://www.mudth-niyleta.com/ Mulungu Aboriginal Corporation Primary Health Care Service https://mulungu.com.au/ NPA Family and Community Services https://www.npaws.com.au/ Wuchopperen Health Service https://www.wuchopperen.org.au/ Townsville Aboriginal and Islander Health Service https://www.taihs.net.au/

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Facilities		
Indicator	**Description**	**Source**
Dental services	This dataset was compiled by the JCU project team. This dataset includes the location of services providing general dental care services in the project region. Private, ACCHO, public and public outreach dental services are included. *Notes:* HHS also provide a School Dental Service at various times and locations through the project region.	Multiple sources were used for the location data: Healthmap. National Health Services Directory - General Dental Practice. Accessed between 10th and 22nd December 2021. Available at https://healthmap.com.au/ Hospital and Health Service websites in the project region: Cairns and Hinterland Hospital and Health Service. Dental Services. Accessed 22 December 2022. Available at https://cairns-hinterland.health.qld.gov.au/healthcare-services/dental-services Mackay Hospital and Health Service. Dental Health. Accessed 22 December 2022. Available at https://www.mackay.health.qld.gov.au/your-hospitals/mackay-base-hospital/dental-services/ North West Hospital and Health Service. Oral Health. Accessed 22 December 2022. Available at https://www.northwest.health.qld.gov.au/clinical-services/oral-health/ Torres and Cape Hospital and Health Service. Home Page. Accessed 22 December 2022. Available at https://www.health.qld.gov.au/torres-cape Townsville Hospital and Health Service. Oral Health Services. Accessed 22 December 2022. Available at https://www.townsville.health.qld.gov.au/services/oral-health-services/ Location data were sourced from the websites of ACCHO in the project regions as outlined in the ACCHO source section.
Aged care services	The locations of residential aged care facilities and organisations providing care under the Home Care Package initiative are displayed on the map (and are current as at 30 June 2021).	Australian Institute of Health and Welfare. GEN Aged Care Data. Aged care service list: 30 June 2021. Available at https://www.gen-agedcaredata.gov.au/Resources/Access-data/2021/October/Aged-care-service-list-30-June-2021 The point layer has been restricted to services in the project region.

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Potentially Preventable Hospitalisations (PPH)				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Total PPH	Count; Crude rate; Age-standardised rate	SA3	Potentially Preventable Hospitalisations (PPH) are represented on the map as age-standardised rates (per 100,000 population). *Selected notes from AIHW:* Definition of PPH: Data for this measure are defined in accordance with the National Healthcare Agreement (NHA) indicator PI 18-Selected potentially preventable hospitalisations. PPH per 100,000 people (age-standardised): Age-standardised rates are directly standardised to the Australian estimated resident population as at 30 June 2001. Age-standardised rates are suppressed where crude rates are suppressed OR if the population in any 5-year age group in an area is less than 30. The counting unit for this publication was an episode of stay, measured by financial year of separation. This may be a complete hospital stay (to discharge, transfer or death), or a part of the stay if there was a change of care type (for example from acute to rehabilitation). As a record is included for each hospitalisation, not for each patient, patients hospitalised more than once or transferred between hospitals in the financial year will have more than one record. Geography is based on area of usual residence For further information about the dataset, see https://www.aihw.gov.au/reports/primary-health-care/disparities-in-potentially-preventable-hospitalisations-exploring-the-data/contents/introduction	Australian Institute of Health and Welfare, Disparities in potentially preventable hospitalisations across Australia, 2012-13 to 2017-18, Age-standardised rate of potentially preventable hospitalisations per 100,000 people, by Statistical Area Level 3 (SA3), AIHW (2020). Available from https://www.aihw.gov.au/reports/primary-health-care/disparities-in-potentially-preventable-hospitalisations-exploring-the-data/data
Chronic conditions PPH				
Acute conditions PPH				
Vaccine preventable PPH				

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PPH of total hospitalisations	Count; %	HHS	The proportion of total PPH of total admissions (as calculated by the research project team, based on the original dataset) are displayed on the map. *Notes:* a. Excludes episodes of admitted patient care for newborns without qualified days, posthumous organ procurement and boarders. b. An episode of care for an admitted patient may be a total hospital stay or a portion of a stay that begins or ends in a change of care type. c. Restricted to usual residents of Torres & Cape, Cairns and Hinterland, North West, Townsville and Mackay HHSs d. Potentially preventable hospitalisation criteria are as per AIHW Australian Hospital Statistics publication. e. PPH Definitions: For information on PPH categories and definitions please refer to National Health Agreement: potentially preventable hospitalisations, 2021. https://meteor.aihw.gov.au/content/index.phtml/itemId/725793 f. PPH definition exception: The Qld definition retained the previous Qld PPH diabetes complication definition, which expands the selection to the recording of diabetes as a secondary diagnoses for selected principal diagnoses. The current National Health Agreement defines potentially preventable hospitalisations for diabetes complications only where it is recorded as a principal diagnosis. g. The sum of PPH categories 'Vaccine Total', 'Chronic Total' and 'Acute Total' does not necessarily add to 'Total PPH', as a single episode can be counted in multiple sub-categories.	Statistical Reporting and Coordination, Statistical Services Branch, Queensland Health. Table 9) Episodes of admitted patient care for potentially preventable hospitalisations by financial year and HHS of usual residence, for usual residents of Torres & Cape, Cairns and Hinterland, North West, Townsville and Mackay HHSs, 2010/2011 to 2020/2021 p. Unpublished data provided at request. Created 11th November 2021. Data are sourced from the Queensland Hospital Admitted Patient Data Collection (QHAPDC). "The data within this file must only be used by the recipient for activities directly related to details of this request. Any further or subsequent use of the information for other purposes must be further authorised by Statistical Reporting and Coordination."

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Hospital performance			
Indicator	**Measures**	**Description**	**Source**
Hospital admissions per year Also included in the dataset: Number of elective surgeries Elective surgery waiting times Number of emergency department presentations Emergency department waiting times	Count	The number of hospital admissions for public health services with available yearly data (2019/2020) are displayed on the map. Information and performance data (AIHW) about each facility has been appended to the location data. Some data are updated at regular intervals. *Selected AIHW notes on performance data:* -A stay in hospital, termed patient admission, represents a new episode of care. -Elective surgery is planned surgery that can be booked in advance as a result of a specialist clinical assessment resulting in placement on an elective surgery waiting list. The treating doctor determines how urgently surgery is needed, then assigns the patient to one of three elective surgery urgency categories – Category 1 (surgery is recommended within 30 days), Category 2 (surgery is recommended within 90 days), or Category 3 (surgery is recommended within 365 days). Data are presented for the median time until surgery is received, and the percentage of patients who received their surgery within the recommended time. -The percentage of patients arriving at the hospital's emergency department (ED) who commenced treatment within the maximum recommended time. Recommended maximum waiting times vary depending on the urgency of the patient's need for care (their triage category) as assessed by a healthcare professional in the emergency department. The five triage categories are: Category 1(Resuscitation), Category 2 (Emergency), Category 3(Urgent), Category 4 (Semi-urgent) and Category 5 (Non-urgent). -This measure is the rate of S. aureus bloodstream infections associated with care provided at this hospital. The rate is calculated as the number of healthcare-associated cases of S. aureus divided by the total number of patient days under surveillance (x 10,000). For more information, see the appropriate sources referenced in the Credits section.	Australian Institute of Health and Welfare. MyHospitals. Individual hospital datasets. Data as of August 17 2021. Available from https://www.aihw.gov.au/reports-data/myhospitals/content/data-downloads/hospital-downloads

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Hospital performance			
Indicator	**Measures**	**Description**	**Source**
Hospital admissions (Quarter to Sept 2021)	Count	Hospital admissions data for public health services with available quarterly (July/August/September 2021 quarter) data are displayed. Other data for this time period are included in the dataset. *Notes:* Data were retrieved from the Queensland Health Performance website. For information about Hospital Performance data variables, refer to the Queensland Health Hospital Performance website at http://www.performance.health.qld.gov.au/.	Queensland Health (2021). Hospital Performance. Individual Hospitals and health facilities. Queensland Government. Accessed 22nd December 2021. Available at http://www.performance.health.qld.gov.au/.
Emergency department Category 1 patients seen within recommended times (Quarter to Sept 2021)	Count; %	The proportion of Category 1 emergency department patients seen within the clinically recommended time of 2 mins is displayed. *Notes:* Category 1: Immediately life-threatening. Patient should be seen by a treating doctor or nurse within 2 minutes of arriving. Category 2: Imminently life-threatening. Patient should be seen by a treating doctor or nurse within 10 minutes of arriving. Category 3: Potentially life-threatening. Patient should be seen by a treating doctor or nurse within 30 minutes of arriving. Category 4: Potentially serious. Patient should be seen by a treating doctor or nurse within 60 minutes of arriving. Category 5: Less urgent. Patient should be seen by a treating doctor or nurse within 120 minutes of arriving. Data were retrieved from the Queensland Health Performance website. For information about Hospital Performance data variables, refer to the Queensland Health Hospital Performance website at http://www.performance.health.qld.gov.au/.	

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Hospital performance			
Indicator	**Measures**	**Description**	**Source**
Category 4 and Category 5 emergency department attendances (Quarter to Sept 2021)	Count; %	Emergency department attendances triaged as Category 4 and 5 (combined) are displayed as a proportion of total emergency department attendances. *Notes:* Category 1: Immediately life-threatening. Patient should be seen by a treating doctor or nurse within 2 minutes of arriving. Category 2: Imminently life-threatening. Patient should be seen by a treating doctor or nurse within 10 minutes of arriving. Category 3: Potentially life-threatening. Patient should be seen by a treating doctor or nurse within 30 minutes of arriving. Category 4: Potentially serious. Patient should be seen by a treating doctor or nurse within 60 minutes of arriving. Category 5: Less urgent. Patient should be seen by a treating doctor or nurse within 120 minutes of arriving. Data were retrieved from the Queensland Health Performance website. For information about Hospital Performance data variables, refer to the Queensland Health Hospital Performance website at http://www.performance.health.qld.gov.au/.	Queensland Health (2021). Hospital Performance. Individual Hospitals and health facilities. Queensland Government. Accessed 22nd December 2021. Available at http://www.performance.health.qld.gov.au/.

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Hospital performance			
Indicator	**Measures**	**Description**	**Source**
Elective surgery: patients treated within recommended time (Quarter to Sept 2021)	Count; %	The proportion of patients receiving elective surgery within clinically recommended times is displayed. *Notes:* Category 1: A condition that could get worse quickly to the point that it may become an emergency. Patient should have surgery within 30 days of being added to the waiting list. Category 2: A condition causing some pain, dysfunction or disability, but is not likely to get worse quickly or become an emergency. patient should have surgery within 90 days of being added to the waiting list. Category 3: A condition causing minimal or no pain, dysfunction or disability, which is unlikely to get worse quickly and which does not have the potential to become an emergency. Patient should have surgery within 365 days of being added to the waiting list. Data were retrieved from the Queensland Health Performance website. For information about Hospital Performance data variables, refer to the Queensland Health Hospital Performance website at http://www.performance.health.qld.gov.au/.	Queensland Health (2021). Hospital Performance. Individual Hospitals and health facilities. Queensland Government. Accessed 22nd December 2021. Available at http://www.performance.health.qld.gov.au/.
Outpatient services (Quarter to Sept 2021)	Count	The number of hospital outpatient episodes of service are displayed. Other data for this time period are included in the dataset. *Notes:* Data were retrieved from the Queensland Health Performance website. For information about Hospital Performance data variables, refer to the Queensland Health Hospital Performance website at http://www.performance.health.qld.gov.au/.	Queensland Health (2021). Hospital Performance. Individual Hospitals and health facilities. Queensland Government. Accessed 22nd December 2021. Available at http://www.performance.health.qld.gov.au/.

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Hospital performance			
Indicator	**Measures**	**Description**	**Source**
Hospital admissions (2020/2021)	Count	Episodes of admitted patient care in 2020/2021 financial year are displayed on the map. Admissions per 1,000 population for SA2 (patients' usual residence) was calculated by the project team using the Estimated Resident Population for 2020 (ABS). *Notes:* Data from 2020/2021 are preliminary and subject to change. Data includes public and private hospitals. a. Excludes episodes of admitted patient care for newborns without qualified days, posthumous organ procurement and boarders. b. An episode of care for an admitted patient may be a total hospital stay or a portion of a stay that begins or ends in a change of care type. c. Restricted to usual residents of Torres & Cape, Cairns and Hinterland, North West, Townsville and Mackay HHSs d. Based on ASGS 2016 from July 2017 to December 2020 e. The following SA2s has been aggregated due to low population counts: 1148 [Gordonvale-Trinity] includes 1150 [Lamb Range] 1351 [Pioneer Valley] includes 1345 [Eungella Reservoir] 1355 [Slade Point] includes 1347 [Mackay Harbour] 1359 [Airlie-Whitsundays] includes 1360 [Cape Conway]	Admissions data sourced from: Statistical Reporting and Coordination, Queensland Statistical Services Branch, Queensland Health, Episodes of admitted patient care by financial year and Statistical Area 2 (SA2) of usual residence, 2010/2011 to 2020/2021. Dated 11th November 2021 and obtained via request. Data are sourced from the Queensland Hospital Admitted Patient Data Collection (QHAPDC). Estimated resident population sourced from: Australian Bureau of Statistics (release 27 August 2021) Regional population by age and sex, 2020, ABS. The original dataset can be accessed from https://www.abs.gov.au/statistics/people/population/regional-population-age-and-sex/2020#key-statistics.

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Hospital performance			
Indicator	**Geography**	**Description**	**Source**
Hospital service standards performance data (annual reports)	HHS	Hospital and Health Service Performance against the Service Delivery Statement targets are available in this layer. *Notes:* Data for the HHS Annual report 2020/2021 have been used for all HHS with the exception of North West HHS which uses the 2019/2020 annual report. It is important to refer to the data notes for the annual reports that are available at the publications webpage for each HHS.	*Sources for annual report data:* Cairns and Hinterland Hospital and Health Service, State of Queensland. 2021. Cairns and Hinterland Hospital and Health Service Annual Report 2020-2021. Accessed 22nd December 2021. Available at https://www.mackay.health.qld.gov.au/about-us/publications/ Mackay Hospital and Health Service, State of Queensland. 2021. Mackay Hospital and Health Service Annual Report 2020-2021. Accessed 22nd December 2021. Available at https://cairns-hinterland.health.qld.gov.au/about-us/corporate-publications-and-reporting/annual-reports/ North West Hospital and Health Service, State of Queensland. 2020. North West Hospital and Health Service Annual Report 2019–2020. Accessed 21 January 2022. Available at https://www.northwest.health.qld.gov.au/about-us/corporate-documents-and-publications/ Torres and Cape Hospital and Health Service, State of Queensland. 2021. Torres and Cape Hospital and Health Service Annual Report 2020-2021. Accessed 22nd December 2021. Available at https://www.health.qld.gov.au/torres-cape/html/publication-scheme Townsville Hospital and Health Service, State of Queensland. 2021. Townsville Hospital and Health Service Annual Report 2020-2021. Accessed 22nd December 2021. Available at https://www.townsville.health.qld.gov.au/about-us/strategies-and-publications/

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Medicare-subsidised primary health care services				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Total General Practitioner attendances	Services per 100 people	SA3	Data about attendances for primary health care services (sourced from the Medicare Benefits Schedule and published by the Australian Institute of Health and Welfare) are displayed on the map. General Practitioner attendances are represented on the map as number of services per 100 people in 2020/2021. This is the sum of Medicare-subsidised services (as described in the notes below) from eligible claims. This does not include any bulk billed incentive items or other top-up items. *Selected notes from AIHW:* GP attendances data include Enhanced Primary Care, After-hours GP attendances, Practice Incentive Program (PIP) services, and Other GP services. These services are Medicare-subsidised patient/doctor encounters, such as visits and consultations, for which the patient has not been referred by another doctor. These services can be provided by a GP or other medical practitioner. Excludes services provided by practice nurses and Aboriginal and Torres Strait Islander health practitioners on a GP's behalf. BTOS 101, 102 (c), 103 (GP subtotals: Enhanced Primary Care, After-hours GP attendances, PIP services, and Other). A list of BTOS item numbers is available at http://medicarestatistics.humanservices.gov.au/statistics/do.jsp?_PROGRAM=/statistics/std_btos_map&start_dt=0&end_dt=0 For more information see https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-health-local-areas-2020-21/contents/about	Australian Institute of Health and Welfare. Medicare-subsidised GP, allied health and specialist health care across local areas health care: 2019-20 to 2020-21. Report edition released 27 October 2021. Accessed 11th December 2021. Available at https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-health-local-areas-2020-21/contents/about

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Medicare-subsidised primary health care services				
Indicator	**Measures**	**Geography**	**Description**	**Source**
After-hours General Practitioner attendances	Services per 100 people	SA3	Data about attendances for primary health care services (sourced from the Medicare Benefits Schedule and published by the Australian Institute of Health and Welfare) are displayed on the map. After-hours General Practitioner attendances are represented on the map as number of services per 100 people in 2020/2021. This is the sum of Medicare-subsidised services (as described in the notes below) from eligible claims. This does not include any bulk billed incentive items or other top-up items. *Selected notes from AIHW:* After-hours GP attendances include urgent and non-urgent after-hours GP care. GP and non-specialist medical practitioner attendances provided on a public holiday, a Sunday, and during specified periods between Monday and Saturday. Note that times vary depending on type of after-hours care, whether urgent or non-urgent, and for services provided at a place other than a consulting room. Groups A11, A22, A23; Subgroups A7.10,A40.29, A40.30 For more information see https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-health-local-areas-2020-21/contents/about	Australian Institute of Health and Welfare. Medicare-subsidised GP, allied health and specialist health care across local areas health care: 2019-20 to 2020-21. Report edition released 27 October 2021. Accessed 11th December 2021. Available at https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-health-local-areas-2020-21/contents/about

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Medicare-subsidised primary health care services				
Indicator	**Measures**	**Geography**	**Description**	**Source**
General Practitioner telehealth (patient-end support)	Services per 100 people	SA3	Data about attendances for primary health care services (sourced from the Medicare Benefits Schedule and published by the Australian Institute of Health and Welfare) are displayed on the map. General Practitioner telehealth support (patient-end support) are represented on the map as number of services per 100 people in 2020/2021. This is the sum of Medicare-subsidised services (as described in the notes below) from eligible claims. This does not include any bulk billed incentive items or other top-up items. *Selected notes from AIHW:* Provision of clinical support by a medical practitioner to a patient (in a telehealth eligible area) who is participating in a video conferencing consultation with a specialist or consultant physician. Does not include telephone or email consultations. From 1 July 2018, new items were introduced to enable non-specialist medical practitioners to provide general attendance services. Subgroups A30.1, A30.2; Items812, 827, 829, 867, 868, 869,873, 876, 881, 885, 891, 892 For more information see https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-health-local-areas-2020-21/contents/about	Australian Institute of Health and Welfare. Medicare-subsidised GP, allied health and specialist health care across local areas health care: 2019-20 to 2020-21. Report edition released 27 October 2021. Accessed 11th December 2021. Available at https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-health-local-areas-2020-21/contents/about

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Indigenous-specific health checks				
Indicator	**Measures**	**Geography**	**Description**	**Source**
Follow up service of Indigenous-specific health check patients	Count; %	SA3	The proportion of Indigenous-specific health check patients who received a follow-up service in the 12 months following their health check(s) in 2018/2019 financial year is displayed on the map. Selected notes from the data source (AIHW): Indigenous-specific health check follow-up services include Medicare Benefits Schedule (MBS) items: - 10987 (Aboriginal Health Practitioner or Practice Nurse, face-to-face) - 81300–81360 (Allied Health, face-to-face) - 93200, 93202 (Aboriginal Health Practitioner or Practice Nurse, telehealth) - 93048, 93061 (Allied Health, telehealth) The MBS items above are intended for people of Aboriginal or Torres Strait Islander descent, so all recipients are assumed to be Indigenous. Data are reported by date of service of Indigenous-specific health checks. Only MBS claims processed on or before 30 April 2021 have been analysed. In some cases, the same follow-up service may occur in the 12 months following separate Indigenous-specific health checks in consecutive financial years. Patients may not sum to total due to rounding. For further details, refer to Technical notes at https://www.aihw.gov.au/reports/indigenous-australians/indigenous-health-checks-follow-ups/contents/data-sources-and-notes	Australian Institute of Health and Welfare. Indigenous health checks and follow-ups. Published 2 July 2021. Table FS09: Indigenous health check patients who received follow-up services by Statistical Area Level 3 (SA3), 2018–19. Available at https://www.aihw.gov.au/reports/indigenous-health-welfare-services/indigenous-health-checks-follow-ups/contents/overview

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Aged care				
Indicator	**Measures**	**Geography**	**Description**	**Source**
People in permanent residential aged care aged 65 years and over (as a proportion of total population aged 65 years and over)	Count; %	SA3	The proportion of people aged 65 years and over in permanent residential aged care (of the total population aged 65 years and over) for the year 1st July 2020 to 30th June 2021 is displayed on the map. Data by sex and age have been included in the dataset and have been calculated by the project team using the original dataset. *Notes:* SA3 is based on residential aged care facility location using the Australian Statistical Geography Standard 2016	Australian Institute of Health and Welfare National Aged Care Data Clearinghouse, by request Table 1. Number of people in permanent residential aged care in Queensland, by SA3, by sex, by age group, as at 30 June 2010-2021 Population data: Australian Bureau of Statistics, Regional population by age and sex, 2020, Released 27 August 2021 Table 1. Summary statistics – 30 June 2020 Available at https://www.abs.gov.au/statistics/people/population/regional-population-age-and-sex/2020#data-download

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Aged care				
People in permanent residential aged care who are aged 65 years and over	Count; %	SA3	The proportion of people in permanent residential aged care who are aged 65 years and over (for the year 1st July 2020 to 30th June 2021 is displayed on the map. Data by sex and age have been included in the dataset and have been calculated by the project team using the original dataset. *Notes:* SA3 is based on residential aged care facility location using the Australian Statistical Geography Standard 2016	Australian Institute of Health and Welfare National Aged Care Data Clearinghouse, by request Table 1. Number of people in permanent residential aged care in Queensland, by SA3, by sex, by age group, as at 30 June 2010-2021 Population data: Australian Bureau of Statistics, Regional population by age and sex, 2020, Released 27 August 2021 Table 1. Summary statistics – 30 June 2020 Available at https://www.abs.gov.au/statistics/people/population/regional-population-age-and-sex/2020#data-download

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Aged care				
People aged 65 years and over with Home Care Packages (as a proportion of total population aged over 65 years)	Count; %	SA3	The proportion of people aged 65 years and over (of the total population aged 65 years and over) with Home Care Packages for the year 1st July 2020 to 30th June 2021 is displayed on the map. Data by age and sex are included in the dataset and have been calculated by the project team using the original dataset. *Notes:* SA3 is based on the residence of the person receiving Home Care using the Australian Statistical Geography Standard 2016. Estimated Resident Population for 2020 has been used to calculate the proportion of people aged 65 years and over with Home Care Packages.	Aged care data: Australian Institute of Health and Welfare National Aged Care Data Clearinghouse, by request Table 2. Number of people with Home Care Packages in Queensland, by SA3, by sex, by age group, as at 30 June 2010-2021 Population data: Australian Bureau of Statistics, Regional population by age and sex, 2020, Released 27 August 2021 Table 1. Summary statistics – 30 June 2020 Available at https://www.abs.gov.au/statistics/people/population/regional-population-age-and-sex/2020#data-download

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Aged care				
People with Home Care Packages who are aged 65 years and over	Count; %	SA3	The proportion of people aged 65 years and over with Home Care Packages for the year 1st July 2020 to 30th June 2021 is displayed on the map. Data by age and sex are included in the dataset and have been calculated by the project team using the original dataset. *Notes:* SA3 is based on the residence of the person receiving Home Care using the Australian Statistical Geography Standard 2016. Estimated Resident Population for 2020 has been used to calculate the proportion of people aged 65 years and over with Home Care Packages.	Aged care data: Australian Institute of Health and Welfare National Aged Care Data Clearinghouse, by request Table 2. Number of people with Home Care Packages in Queensland, by SA3, by sex, by age group, as at 30 June 2010-2021 Population data: Australian Bureau of Statistics, Regional population by age and sex, 2020, Released 27 August 2021 Table 1. Summary statistics – 30 June 2020 Available at https://www.abs.gov.au/statistics/people/population/regional-population-age-and-sex/2020#data-download

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