

Our health services

Costs and utilisation



Our health services

Introduction

Queensland Health is divided into 16 Hospital and Health Services (HHS) districts which are responsible for Queensland Health clinical and public health services. Fifteen are specific to geographical regions of the State whilst the Queensland Children's HHS has state-wide responsibility for the health of children and young people and operates the only tertiary paediatric hospital, Queensland Children's Hospital (QCH), located in Brisbane. Several specialist paediatric and adult outreach services are provided to regional and remote communities by Queensland Health.²⁵⁴

Queensland is also serviced by multiple private hospitals, non-government organisations (NGOs), Aboriginal and Torres Strait Islander Community Controlled Health Organisations, general practices, seven primary health networks (PHNs) and legions of volunteers and charitable organisations. COVID-19 brought to the forefront the critical role of community helplines and alternative mechanisms for health-service delivery such as telehealth.

In this section we describe the cost of health care in Queensland and provide summary data on health care services that are predominantly funded by federal and/or state governments. We do not include data from the vast range of NGOs mentioned above. Limited data for 2020 are presented given the ongoing COVID-19 pandemic at the time of this report.

The cost of health care

A total of \$38.9 billion from all sources, including federal and state governments, was spent on health in Queensland in 2017–18 (Table 4.1).^{*} Expenditure in Queensland was 21% of Australian health expenditure (\$185.4 billion), consistent with Queensland's population share (20% in December 2018).^{*}

Per capita recurrent spending (all sources) in Queensland (\$7840 per person) was similar to national spending in 2017–18 (\$7485 per person), and second highest of the jurisdictions following the Northern Territory (Figure 4.1a).^{*}

Recurrent spending on health in Queensland increased annually by an average of 2.4% from 2007–08 to 2017–18, and was the third highest of the jurisdictions (Figure 4.1b).^{*}

From all funding sources, recurrent spending in Queensland was 42% for hospital services (31% public and 10% private) and 11% for specialist consultations in 2017–18.^{*} Primary health care accounted for 37% of total recurrent spending in 2017–18. This level of care included 4.2% for dental services and 1.3% for public health spending.^{*}

Table 4.1 Health expenditure by source of funding, Queensland, 2017–18*

	Total \$m	% of total
Government	27,040	69
Australian	15,960	59
State and local	11,080	41
Non-government	11,869	31
Individuals	5,760	49
Health insurance providers	3,331	28
Other	2,778	23
Total health expenditure	38,909	100

Queensland budget

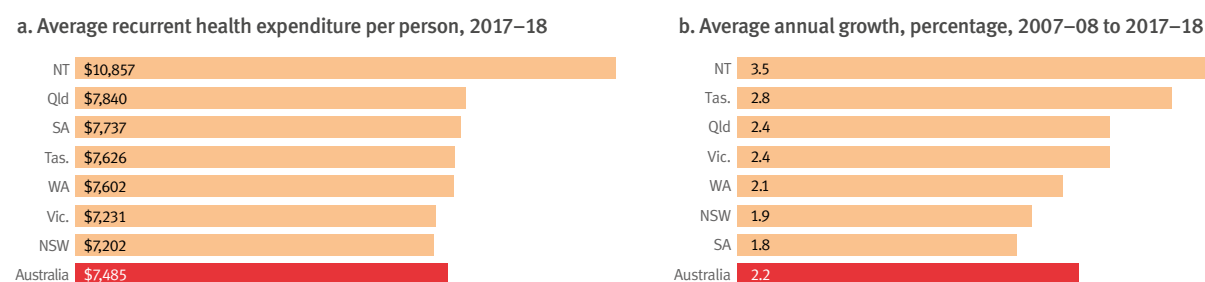
The Queensland Government spent \$18.1 billion (including federal allocation and GST) on the total health budget in 2018–19.²⁵⁶ It was the largest component of state government expenditure (37%) followed by education (19%). In 2019–20, health was budgeted to cost \$18.5 billion.⁵⁵ This did not account for the advent of COVID-19.

Cost by disease group

In 2015–16, the most recent year for which data were available, approximately three-quarters of national recurrent expenditure on health could be attributed to specific disease groups and conditions.²⁵⁵

Cardiovascular disease was the leading cause of public hospital admitted patient expenditure in 2015–16 (11% of total), followed by injuries (9.3%), gastrointestinal diseases (8.6%), and reproductive and maternal conditions (7.9%).²⁵⁵

Figure 4.1 Recurrent health expenditure and annual growth, by jurisdiction*



* Reference: Australian Institute of Health and Welfare. *Health Expenditure Australia 2017–18, Cat.no HWE 77. 2019. Canberra: AIHW*

Personal health spending

Nationally, in 2017–18 personal out-of-pocket health costs amounted to an average of \$1578 per person, which was 2.5% of average annual income.²⁵⁵ In spite of fluctuations in the growth of both average personal spending and average annual income, there was a general increase in the proportion of health spending to income over the decade from 2007–08.²⁵⁵

Aboriginal and Torres Strait Islander health expenditure

In 2015–16, all government (Federal and State) direct expenditure on the Aboriginal and Torres Strait Islander healthy lives program was \$6.3 billion nationally, with \$1.7 billion of that expenditure occurring in Queensland, the highest of any jurisdiction.²⁵⁷ Funding to Aboriginal and Torres Strait Islander specific services comprised 23% of total direct expenditure and 19% of Queensland's direct expenditure with the remainder expended by mainstream services. Per person direct expenditure nationally in 2015–16 was \$8462 and \$7839 for Queensland which was the third lowest of the jurisdictions.²⁵⁷

This investment into the health of Aboriginal and Torres Strait Islander people has been well placed as Queensland is leading the way in closing the gap in life expectancy and continues to work towards improving other health inequities.

Health service utilisation

Inpatients

In 2018–19, there were 2,731,634 admitted episodes of care to acute public (57%) and private (43%) hospitals in Queensland, equating to a total of 6,533,811 patient days.¹⁰⁶ The hospitalisation rate was approximately 55,400 per 100,000 population. This compares to 1,696,874 episodes, 4,959,314 patient days and a hospitalisation rate of 39,000 per 100,000 population in 2008–09. The average length of stay in public hospitals was 2.5 days compared to 2.2 days in private hospitals in 2018–19.

Of the 2018–19 admissions, 5.6% were for Aboriginal and Torres Strait Islander people—the hospitalisation rate was approximately 67,800 per 100,000 population and the average length of stay was 2.2 days.

For acute public hospitals there were 1,567,258 admitted episodes of care in Queensland in 2018–19,¹⁰⁶ (917,264 (59%) same day episodes and 649,994 (41%) overnight/longer episodes)—a 30% increase from 2014–15. The average length of stay for overnight/longer episodes was 4.6 days.¹⁰⁶

- Acute care accounted for 95% of admissions and mental health accounted for 2.1%.
- Eighty per cent of episodes were for medical reasons and 14% were for surgical reasons.
- The most common reason for admission was haemodialysis, accounting for 13% of episodes. This was a 15% increase in haemodialysis episodes of care from 2014–15.



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Emergency departments

In 2018–19 there were 1,561,825 presentations to public hospital EDs in Queensland (excluding Group C hospitals), a rate of 309.9 per 1000 population and a 1.5% increase on the average rate since 2014–15.²⁵⁸ The age-standardised presentation rate for Aboriginal and Torres Strait Islander people was 526 per 1000 population and 256 per 1000 for other Queenslanders. Rates by age, sex and Aboriginal and Torres Strait Islander status are presented in Figures 4.2 and 4.3.

At a glance

In 2017–18, total government expenditure on health in Queensland was almost \$39 billion

In 2018–19, there were 2,731,634 admitted episodes of care to acute public (57%) and private (43%) hospitals

The rate of calls to 13 HEALTH (13 43 25 84) in 2019–20 was 7236 per 100,000 population

In 2019–20, 23,026 patients were referred for medical retrieval or aeromedical transport

In 2019–20, there were over 182,000 non-admitted telehealth services provided by Queensland Health



Indigenous Respiratory Outreach Care service

Figure 4.2 ED presentation rates by age and sex, Queensland, 2018–19²⁵⁸

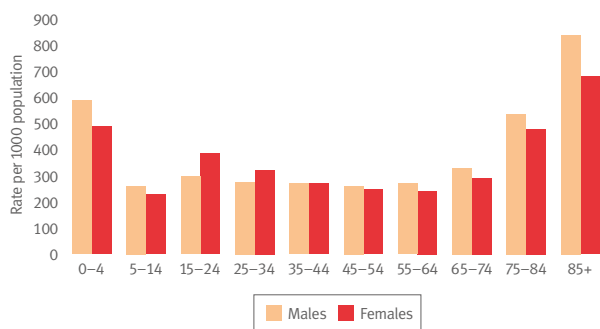
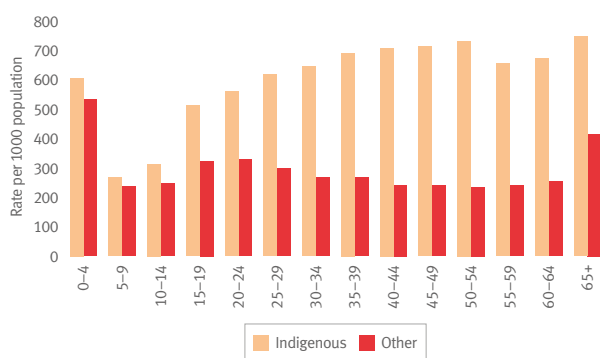


Figure 4.3 ED presentation rates by age and Aboriginal and Torres Strait Islander status, Queensland, 2018–19²⁵⁸



The majority (99%) of episodes were emergency presentations with planned review visits and pre-arranged admissions accounting for 8613 and 5359 presentations respectively. Triage category 1 (that is, those requiring resuscitation) accounted for 15,133 (1.0%) presentations and the lowest level of urgency, category 5, accounted for 70,229 (4.4%).²⁵⁸ More than one-third of presentations (35%) arrived by ambulance, air ambulance or helicopter rescue services.

Outpatient services

In 2018–19, there were 5,643,673 public and private outpatient episodes of care in Queensland acute public hospitals. The top three services were for midwifery (20%), orthopaedics (15%) and physiotherapy (13%).¹⁰⁷ Outpatient services have remained relatively stable since 2016–17.

Other acute public hospital activity

In 2018–19, there were 5,304,087 pathology services, 502,370 pharmacy services, 1,549,453 diagnostic imaging services and 95,109 other services provided in Queensland acute public hospitals to both public and private patients.¹⁰⁷

General practice

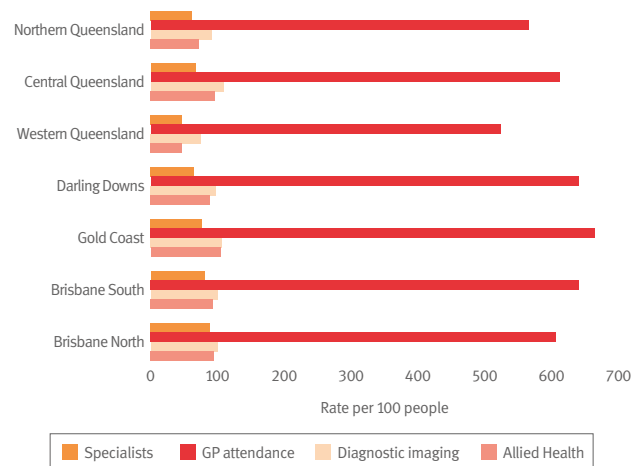
In Queensland in 2018–19, there were 25,265,113 GP attendances. The average number of GP visits per year were²⁵⁹:

- 5.1 visits by children aged up to 4 years and 2.5 visits for those aged 5–14 years
- 3.4 visits by young people aged 15–24 years
- 3.9 visits by younger adults aged 25–34 years
- 4.2 visits by adults aged 35–44 years

- 5.5 visits by middle-aged adults (45–64 years)—5.0 visits for 45–54 year-olds and 6.1 visits for 55–64 year-olds
- 10.1 visits by those aged 65 years and older—8.3 visits for 65–74 year-olds, 12 visits for 75–84 year-olds and 14 visits for those aged 85 years and older.

In 2017–18, after accounting for age, the lowest attendance rates for GP services were in the Western Queensland PHN which also had the lowest rates of specialist, allied health and diagnostic imaging services (Figure 4.4).²⁶⁰

Figure 4.4 Medicare subsidised health services by primary health network, Queensland, 2017–18²⁶⁰



Allied health

Allied health comprises a group of professionals and assistants that provide critical complementary health services including audiology, clinical measurements (for example lung function testing), exercise physiology, medical radiation, music therapy, nutrition and dietetics, occupational therapy, pharmacy, physiotherapy, podiatry, prosthetics and orthotics, social work and speech pathology.

In 2017–18, allied health staff employed by Queensland Health provided 1,005,232 outpatient clinic occasions of service (8% of all outpatient occasions of service) and led 42,231 outpatient clinics.²⁶⁰ Occasions of service increased by 24% from 2015–16. In addition to public hospital activity, there were high rates of out-of-hospital, Medicare-subsidised services (Figure 4.4). Similar to GP attendances, rates in Western Queensland PHN (46.8 per 100 persons) were approximately half of those in South East Queensland PHNs (93–105 per 100 persons). In addition to Medicare-subsidised services, there were an additional 10,583,341 non-hospitalised allied health services in Queensland in 2017–18 that were subsidised by private health insurance (rate 215 per 100 population).²⁶⁰



Health Contact Centre

The Health Contact Centre (HCC) of Queensland Health provides confidential health assessment and information services to Queenslanders 24 hours a day, seven days a week using multi-channel delivery models. The centre is staffed by nurses, health practitioners and counsellors. Key services, include general enquiries, Quitline, the Schedule 8 Enquiry Service, Immunise Queensland, Way to Wellness, 13 HEALTH (13 43 25 84) Webtest (an alternative option for sexually transmissible infections testing), child health, chronic disease management and triage assessment.

In 2019–20, the HCC interacted with 1,447,391 Queenslanders across multiple channels including phone, SMS, email, letters and the web. The largest volume of inbound calls were to the Triage service for health problems, and COVID-19 response activity, with the most frequent outbound calls being Quitline and Waitlist (Table 4.2).

Table 4.2 Health Contact Centre activity, 2019–20

Inbound calls	Number	Rate ¹
13 HEALTH (13 43 25 84)	120,235	2372
13 QUIT	16,989	335
Triage	388,469	7528
Child Health	22,946	452
Schedule 8 enquiries	22,625	446
Way to Wellness	79	1.0
Outbound calls		
Chronic Disease Management	13,705	270
Child Health	3669	72
General Practice access to viewer	13	0.3
Webtest	988	19
Way to Wellness	2681	52
Quitline	116,867	2304
Immunise	95,285	1879
Rapid Contact	7127	140
Waitlist	130,417	2571

¹ Rate per 100,000 population

For completed activities in the triage service (324,633), 5% were for Aboriginal and Torres Strait Islander people, 81% were for other Queenslanders, and identity was unknown or declined for 12%. By age group, there were:

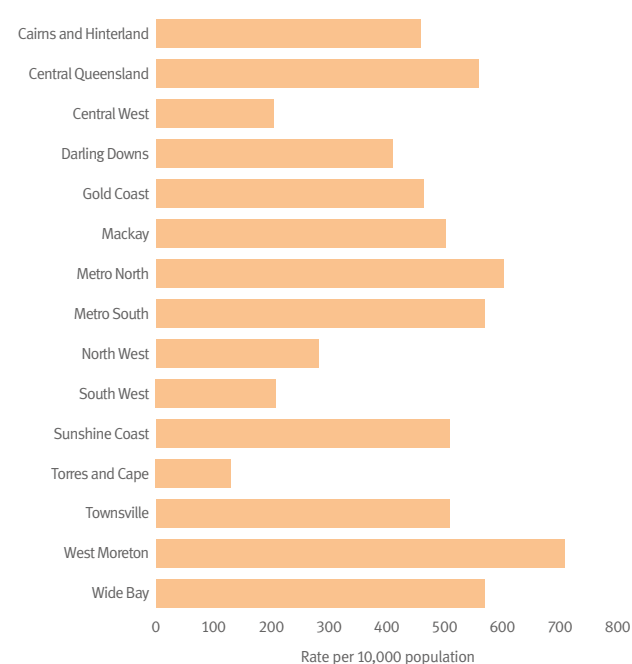
- 95,699 activities (29%) for children aged 0–14 years
- 73,755 (23%) for those aged 15–29 years
- 60,194 (18%) for those aged 30–44 years
- 61,886 (19%) for those aged 45–64 years
- 29,798 (9%) for those aged 65 years and older
- 5767 (2%) of unknown age.

The highest Triage service rate was in the West Moreton HHS (Figure 4.5) and the lowest was in the Torres and Cape HHS.



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Figure 4.5 Triage Service rate by HHS, Queensland, 2019–20



The top 10 most common protocols administered by the Triage Service in 2019–20 are presented in Table 4.3. The miscellaneous protocol includes activities such as medication enquiries, asymptomatic high blood pressure readings and asymptomatic diabetics with high glucose levels.

Table 4.3 Top ten Triage Service activities by protocol, Queensland, 2019–20

Top 10 protocols	2019–20 FY Total
211 Miscellaneous protocol	17,546
23 Colds and flu	14,500
1 Abdominal pain	13,965
19 Chest pain	9657
88 Head injury	7764
56 Fever toddler (age 1–4 years)	6930
104 Vomiting	6557
30 Cough toddler (age 1–4 years)	6372
27 Cough	6306
66 Headache	6137
Total	95,734

Aeromedical retrievals

Aeromedical services in Queensland are coordinated Retrieval Services Queensland. Retrieval services are provided by the Royal Flying Doctor Service (RFDS), LifeFlight Services, Queensland Ambulance Service, Queensland Government Air Rescue and non-government emergency helicopters.

There has been a 14% increase in medical retrievals and aeromedical transports in the past five years.

In 2019–20, 23,026 patients were referred for medical retrieval or aeromedical transport.²⁶¹ Of these, 12,091 were by fixed wing aircraft, 5357 by helicopter, 2815 by ambulance, 2818 by calls including those not transferred, advice only and cancelled and 125 by other services. Of the referrals, 8% were classified as critical and 26% as high dependency. Adults accounted for 76% of patients, children for 12% and obstetric and neonatal patients for 12%. The largest number of referrals came from the Darling Downs (2801), Central Queensland (2781), and Wide Bay (2476 Hospital and Health Services).²⁶¹

During the COVID-19 period from February to September 2020, there were 119 aeromedical retrievals for COVID-19 patients—five were confirmed cases and 114 were suspected cases.²⁶¹

In 2018–19, the RFDS provided services to 11,744 patients and immunisations to a further 3019 people in Queensland.²⁶² There were 1099 primary evacuations and 10,560 inter-hospital transfers. The service conducted 5345 clinics in Queensland of which 35% were nursing, 31% were GP and 4% were dental clinics. In addition, 36,235 telehealth services were provided. A total of 21,021 plane landings occurred in Queensland and 7,671,244 kilometres were flown.



Telehealth

The Telehealth Support Unit provides system leadership of the Queensland Health telehealth and virtual health program. They work in conjunction with eHealth Queensland and the Telehealth Coordinator workforce across the HHSs to introduce and optimise new models of care. Telehealth can increase equitable access to care, reduce travel for patients, improve rural and remote workforce peer support, manage growing demands on facilities and health services, and support the development of sustainable service delivery models.^{263,264}

Virtual care currently uses three main technologies to deliver services:

- **Clinical videoconferencing:** most common method of delivering telehealth services in Queensland. It allows two or more parties to interact with each other by the simultaneous exchange of video and audio, substituting the need for an in-person service.
- **eConsultation:** collecting clinical information and sending it electronically to another site for evaluation. Information typically includes demographic data, medical history, documentation such as laboratory reports and may include images, video and/or sound files.
- **Remote patient monitoring:** technology to enable the monitoring of patients outside of conventional clinical settings, such as in the home or in a remote area.

While telehealth consultations are provided in admitted, emergency, mental health and non-admitted settings, the majority are provided to non-admitted patients. There are more than 100 specialty types currently available including orthopaedics, paediatrics, remote chemotherapy, antenatal, and cardiac stress testing/holter monitoring.

Non-admitted telehealth services in Queensland had an average annual increase of 40% from 2013–14 to 2019–20.

Key telehealth statistics

- Queensland currently has one of the largest managed telehealth networks in Australia with over 8000 systems deployed in more than 200 hospitals and community facilities.
- Since 2013–14, more than 567,000 non-admitted telehealth service events have been delivered.
- In 2019–20, there were:
 - more than 182,000 non-admitted services²⁶⁵
 - more than 66,000 mental health services²⁶⁵
 - more than 11,000 admitted services¹⁰⁶
 - nearly 700 emergency services²⁶⁷
 - more than 6600 eConsultation services.²⁶⁸

Patients in rural and remote locations receive the most telehealth. For example, patients from Central West HHS receive approximately 40% of non-admitted consultations for specialist appointments.

Telehealth COVID-19 response

The Telehealth Support Unit identified the need to rapidly implement additional telehealth technologies and increase infrastructure capacity in preparation for the pandemic.

The capacity to deliver clinical videoconferencing into a patient's home was increased from 90 concurrent calls to 1600 concurrent calls

The development of a custom Telehealth Virtual Clinic solution which provides streamlined management of high volumes of telehealth consultations, was expedited and implemented to assist in pandemic response strategies.

Web browser based clinical videoconferencing (known as WebRTC) was expedited and implemented within Queensland Health to ensure clinicians had rapid access to technology on any device without the need for additional licences, usernames/ passwords, or application installation. Where appropriate, many clinical services were transitioned to telehealth during the pandemic.

The rapid upscaling of telehealth resulted in twice as many non-admitted service events being delivered in April 2020 than prior to COVID-19, with almost one in 20 non-admitted service events being delivered via telehealth.

University of Queensland–Centre for Online Health, Queensland Telehealth Evaluation

A recent evaluation of the Telehealth Program in Queensland found the following societal productivity gains for the financial year of 2017–18²⁶⁹:

- annual reduction of 27,000 days of travel time to attend specialist outpatient appointments
- annual reduction of 9.6 million kilometres of travel
- annual societal productivity gains of more than \$9 million
- annual reduction of nearly 3000 tonnes of carbon dioxide emissions.

Primary health care services specific to Aboriginal and Torres Strait Islander people

Aboriginal and Torres Strait Islander people may access primary health care in mainstream services or through specific Aboriginal and Torres Strait Islander primary health services funded by federal and state and territory governments. Data on these services are available through the Australian Government's Online Services Report (OSR)²⁷⁰ and the national Key Performance Indicators (nKPIs) under the Aboriginal and Torres Strait Islander Australian's health programme (IAHP).²⁷¹



Queensland Health Asset Library

In 2017–18 there were 29 primary health care organisations specifically servicing Aboriginal and Torres Strait Islander people in Queensland and 1,624,320 contacts with clients occurred (an average of 11.5 contacts per client).²⁷⁰ There were 1,016,210 episodes of care equating to an average of 7.2 episodes of care per client. Queensland had the highest proportions of episodes of care nationally, followed by the Northern Territory and New South Wales. Most services were provided by general practitioners (32%), nurses and midwives (28%) and Aboriginal and Torres Strait Islander health workers and practitioners (17%).

Queensland-based organisations accounted for 15% of the 198 organisations nationally that reported to the OSR,²⁷⁰ however, they provided services to 29% (140,700) of the 483,000 clients of these services nationally, followed by New South Wales with 116,060 clients. Seventeen Queensland organisations had more than 3000 registered clients and 14 organisations provided services in two or more sites in the State. Service gaps in these organisations were apparent: 62% of Queensland services provided for people with a disability, 48% provided aged care services and 45% provided palliative care services.

Alcohol and other drug services

in Queensland, specialist public sector mental health, alcohol and other drug services are delivered through HHSs and funded non-government providers. Specialist alcohol and other drug services provide treatment for people living with substance use disorders. Treatment may include withdrawal management, pharmacotherapy, psychosocial intervention, rehabilitation and harm reduction services.²⁷²

In 2018–19, 180 publicly funded alcohol and other drug treatment agencies in Queensland provided 47,831 treatment episodes to 35,123 clients (97% of episodes were for their own alcohol and other drug use).²⁷³ Among clients, 51% were aged 20–39 years and 66% were male.

Alcohol was the most common drug of concern for Queensland clients (34% of episodes in 2018–19). In Queensland, the level of cannabis reported as the principal drug of concern is a result of the police and court diversion programs operating in the state. Cannabis was the second most common (28%), followed by amphetamines, 25%.²⁷³

Among Queensland clients in 2018–19, there were age differences, with 78% of clients aged 60 years or older having sought treatment for alcohol misuse, and 69% of those aged 10–19 years having sought treatment for cannabis misuse.²⁷³

For Queenslanders with opioid dependence, pharmacotherapy was delivered through 266 prescribers in 2019, and most dosing points were in pharmacies (532 of 645 sites).²⁷⁴ On an average day in Queensland in 2019, about 7158 people received opioid pharmacotherapy (63% were males).