2019

Needs Assessment Summary

CHRONIC DISEASE

phn GOLD COAST

An Australian Government Initiative

Chronic Disease

Local health needs and service issues

- Better systems to support care coordination.
- Referral pathways and care coordination including self-management systems to identify suspected at-risk patients.
- Need for greater focus on prevention, early identification and self-management.
- High numbers of people with chronic disease in Ormeau-Oxenford and Gold Coast North.
- High rates of smoking and harmful alcohol intake across the region.

Key findings

While certain non-modifiable factors such as age, genetics, gender and ethnicity can contribute to chronic disease, many of the conditions can be prevented or managed by addressing common modifiable risk factors. These include smoking, obesity, excessive alcohol intake, physical inactivity, poor nutrition and high blood pressure.

Addressing modifiable risk factors and improving the coordination of care for people with a chronic condition may prevent them from being hospitalised. Reducing potentially preventable hospital admissions is a national PHN priority. Effective clinical management of the condition combined with health service coordination, patient health literacy, self-management and variations in healthcare can contribute to better chronic disease outcomes.

The Gold Coast PHN population has a higher relative standard of health when compared to Australian averages. However, rates of cardiovascular disease across the region are higher than national levels. Coronary heart disease and cerebrovascular disease were the leading causes of death for the Gold Coast population, both of which are related to modifiable risk factors and effective chronic disease management. The Gold Coast PHN region recorded a higher rate of potentially preventable hospitalisations due to chronic disease compared to Australian averages. The number of MBS-funded items claimed by GPs for chronic disease management has been increasing steadily in recent years, but the number of health assessments has been decreasing.

The community and stakeholders from the service system recognise that there are issues relating to community capacity and development, service access, health professional capacity and capability development, coordination and integration and system barriers that are required to be addressed through a variety of measures.

Evidence

Health status

Overall, when compared to national averages, the Gold Coast population has a high relative standard of health. The proportion of adults who self-reported excellent, very good or good health in the Gold Coast PHN region in 2016-17 was 88%, compared to the national average of 85.3%. This trend has decreased from last year for both the Gold Coast average and national average.

The proportion of adults who reported having a long-term health condition in the Gold Coast PHN region in 2016-17 is less than the national average at 40.9% and 49.9% respectively. This Gold Coast rate has decreased from 45.6% in 2015-16. There was no marked difference in life expectancy at birth for either males or females in the Gold Coast PHN region compared to the national average for all people (82.6% vs 82.1%), with life expectancy slightly higher for females mirroring national trends.

The most recent data available at a region level on the number of people living with certain types of chronic disease comes from the 2014-15 Australian Health Survey. Table 1 below provides a breakdown of the prevalence of chronic disease types across the local areas of the Gold Coast in 2014-15.

Region	Type 2 Diabetes Mellitus		Circulatory diseases		Respiratory diseases		Musculoskeletal diseases	
	Number	ASR	Number	ASR	Number	ASR	Number	ASR
Broadbeach-Burleigh	2,904	3.5	13,921	18.6	18,312	29.1	19,542	28.4
Coolangatta	2,367	3.7	10,871	17.5	16,189	30.1	17,306	29.6
Gold Coast- North	3,359	4.2	15,293	18.9	19,668	29.8	21,655	29.5
Gold Coast Hinterland	899	3.9	3,715	17.0	5,667	30.5	5,847	28.2
Mudgeeraba-Tallebudgera	1,261	3.9	5,580	17.5	9,765	29.4	9,537	29.4
Nerang	899	4.2	12,628	19.1	20,277	30.0	19,378	29.4
Ormeau-Oxenford	4,129	4.2	17,170	18.1	32,704	29.3	29,715	29.6
Robina	1,958	4.0	9,203	18.7	14,472	29.9	14,332	29.3
Southport	2,352	4.2	10,383	18.5	16,515	28.6	16,718	29.9
Surfers Paradise	1,546	3.5	8,244	18.8	11,106	28.6	12,029	28.2
Gold Coast	22,960	3.9	107,156	18.5	164,495	29.5	166,059	29.1
National	1,002,371	4.4	4,196,970	18.3	7,077,633	30.8	6,858,779	29.9

Table 1: Number and age-standardised rate (ASR) per 100 of people with reported chronic diseases, by type and SA3 region, 2014-15

Source: PHIDU, social health atlases by primary health networks

There are several interesting findings from this data:
• High numbers of people living with chronic diseases in the areas of Ormeau-Oxenford, and Gold Coast North.

• The rate of type 2 diabetes mellitus was lower than the national average in all SA3 regions on the Gold Coast.

• The rate of circulatory diseases was higher in over half of the Gold Coast SA3 region compared to the national rate.

• The rate of respiratory diseases was higher in Gold Coast Hinterland and Coolangatta.

• The rate of musculoskeletal disorders was lower than the national average in majority of SA3 regions.

Coronary heart disease was the leading cause of death for the Gold Coast population, between 2012 and 2016 with 2,320 deaths. However, The Heart Foundation analysis of the data indicates:
• CHD mortality rate for City of Gold Coast as 74 per 100,000, lower than the Queensland rate of 83.6 per 100,000 (using Mortality Over Regions and Time (MORT) books to compare CHD Mortality (2010-2014)

• All heart admissions rate for City of Gold Coast was 47.6 per 10,000, lower than the Queensland rate of 61.9 per 10,000 (using AIHW National Hospital Morbidity Database)

The second most common cause of death was cerebrovascular disease (i.e. stroke) which accounted for 1,220 deaths.

It is well established that a number of lifestyle-related risk factors increase the likelihood of developing chronic diseases. Understanding the levels of these risk factors within the population can provide an indication of future chronic disease burden and the level of need for health interventions focused on prevention, early identification and management. Chronic disease risk factors include:
• tobacco smoking

• obesity

• excessive alcohol consumption

• physical inactivity

• poor nutrition

• high blood pressure.

In 2014-15 there were 324,529 adult Gold Coast residents who had at least one risk factor of smoking, high alcohol intake, obesity or physical inactivity in. This equates to around 4 in every 5 adults. The rate at which several modifiable risk factors for chronic disease are present across each sub-region of the Gold Coast is shown in Table 2.

Region	High blood pressure	Obesity	Current smoker	Harmful alcohol intake	Physically inactive	Inadequate fruit intake
Broadbeach-Burleigh	22.1	25.9	17.4	19.0	56.4	47.2
Coolangatta	20.7	27.7	19.4	20.7	60.2	48.0
Gold Coast - North	22.0	28.3	19.1	15.7	60.5	48.5
Gold Coast Hinterland	16.3	34.0	14.8	22.2	65.8	47.9
Mudgeeraba-Tallebudgera	17.1	29.9	15.7	19.6	61.0	46.7
Nerang	21.1	29.9	18.1	16.5	63.0	49.0
Ormeau-Oxenford	19.1	30.9	18.2	18.1	62.0	47.8
Robina	20.1	26.9	15.7	17.1	59.5	47.3
Southport	24.8	27.3	19.2	18.4	60.3	49.1
Surfers Paradise	26.2	24.6	16.1	19.2	53.3	47.1
Gold Coast	21.2	28.4	17.8	18.2	60.1	48.0
Queensland	23.4	30.4	17.0	17.2	67.9	48.3
Australia	23.1	27.9	16.1	16.7	66.3	50.1

Table 2: Age-standardised rates of chronic disease risk factors per 100 people, by SA3 region, 2014-15
Source: PHIDU based on National Health Survey 2014-2015

This data shows that rates of obesity, smoking and harmful alcohol intake are comparable or higher for the Gold Coast PHN region than national levels. Rates of high blood pressure are particularly high in Surfers Paradise, and rates of obesity are particularly high in Gold Coast Hinterland. The Gold Cost PHN region fares significantly better than the national average on physical inactivity and nutrition measures.

It should be noted that most data on chronic disease risk factors comes from self-report surveys, which have inherent limitations. There is some inconsistency across different population measures. For example, the Queensland Chief Health Officer (CHO) prepares a 'Health of Queenslanders' report every two years based on survey data. The estimate of the smoking rate for the Gold Coast region in the 2018 CHO report was 9.8%, which is quite different to the levels in Table 2, which come from the National Health Survey by the Australian Bureau of Statistics. These discrepancies are likely due to several factors such as different data items (i.e. 'daily' smoker versus 'current' smoker), different samples and possible changes over different survey periods.

In addition, it should be noted that the obesity rate on the Australian Institute of Health and Welfare's My Healthy Communities website is also based on the National Health Survey which is 22.8%, lower than the national average of 27.9%. The 2018 Health of Queenslanders Report estimated the obesity rate for the Gold Coast as 16.4%, lower than the state average of 30.2% and the lowest in the state.

More objective data is available through the Gold Coast PHN's PATCAT system, which captures de-identified patient data submitted by registered general practices throughout the region. As at June 2019, 146 (73%) Gold Coast practices submitted data, there was a BMI measurement recorded in PATCAT for 122,784 patients aged 18 and over, approximately 29% of all patients in PATCAT[1].

1 Disclaimer: While there are limitations to general practice data in PATCAT (PenCS – data aggregation tool), the data is still able to provide valuable insights into population cohorts that access primary care in the Gold Coast PHN region. Adjusted figures are used for total patient population to reduce the duplication of patient data as patients can visit multiple practices.

This data shows that the rate of obesity (i.e. BMI over 30) amongst a sample of general practice patients in the Gold Coast region aged 18 years and over is approximately 29%, with almost 5% of these being morbidly obese (i.e. BMI over 40). The data shows 34% are overweight but not obese (i.e. BMI 25 to 30). (Please note the accuracy of PATCAT data extracted from General Practices electronic patient records, is dependent upon each individual practices data quality procedures. Some Practices electronic patient records do not have the functionality to record all the measures available in PATCAT reports).

Health service utilisation

There are a number of chronic disease management items listed on the Medicare Benefits Schedule (MBS) that enable GPs to plan and coordinate the health care of patients with chronic or terminal medical conditions, including patients with these conditions who require multidisciplinary, team-based care from a GP and at least two other health or care providers. Table 3 below provides statistics from Medicare Australia on the number of chronic disease management items claimed by GPs in the Gold Coast region between 2014-15 and 2016-17.

MBS ITEM	2016-17	2015-16	2014-15
721 - Preparing a management plan for a patient with a chronic condition	72,157	60,932	55,647
723 - Coordinating the preparation of Team Care arrangements	63,630	54,097	48,721
729 - Contribute to a multidisciplinary care plan prepared by another health care provider	29	28	36
731 - Contribute to a multidisciplinary are plan prepared for resident of an RACF	4,221	4,474	3,448
732 - Reviewing a GP management plan	92,975	84,176	81,841

Table 3 Number of MBS-funded services claimed for chronic disease management in general practice, Gold Coast PHN region, 2014-15 to 2016-17
Source: Department of Human Services, Medicare Australia Statistics. Extracted 26/09/18.

This data shows that the number of services claimed by GPs for chronic disease management has increased significantly over the last three years. The number of GPs claiming these services has also increased significantly—approximately 765 GPs claimed the preparation of a chronic disease management plan in 2016-17, which represents about 94% of the roughly 810 GPs working in the Gold Coast region in that time.

While the data above represents services to people who have a diagnosed chronic condition, there are also items listed on the MBS with a more preventative focus such as routine health assessments. However, the utilisation of these items appears to be decreasing—there are fewer GPs providing fewer health brief and standard assessments occasions of service. However prolonged health assessments and long health assessments are increasing.

• total number of Brief Health Assessments (MBS Item Number 701) remained the same at 1,056 and a decrease in number of providers claiming this item from 178 to 156

• decrease in the total number of Standard Health Assessments (MBS Item Number 703) from 4,945 to 4,636 and a decrease in number of providers claiming this item from 432 to 403

• slight increase in the total number of Long Health Assessments (MBS Item Number 705) from 7,576 to 8,272 with an increase in number of providers claiming this item from 481 to 513

• slight increase in the total number of Prolonged Health Assessments (MBS Item Number 707) from 11,367 to 12,445 and an increase in number of providers claiming this item from 441 to 461.

Table 4 below shows that the Gold Coast had a higher rate of potentially preventable hospitalisations (PPHs) for chronic conditions when compared to Australia (1,439 vs. 1,233 per 100,000 people).

CONDITION	GOLD COAST	AUSTRALIA
All chronic conditions	1,439	1,233
Angina	124	110
Asthma	140	134
Bronchiectasis	41	28
Congestive cardiac failure	183	206
Chronic obstructive pulmonary disease (COPD)	296	267
Diabetes complications	201	187
Hypertension	72	40
Iron deficiency anaemia	363	241
Nutritional deficiencies	4	3
Rheumatic heart disease	15	17

Table 4 Rate of potentially preventable hospitalisations for selected chronic conditions per 100,000 people, age-standardised, 2017-18
Source: Potentially preventable hospitalisations in Australia by small geographic areas

Many presentations to Gold Coast Health emergency departments for iron deficiency are referred by general practice. There is cause for further investigation to determine if iron deficiency is the reason for referral, or if people are being referred to determine the underlying cause of iron deficiency (i.e. gut bleeding).

Data on PPHs at the sub-region level identifies that Southport has the highest overall rate of PPHs for chronic conditions. For particular types of chronic diseases, Mudgeeraba-Tallebudgera has high rates of PPHs for COPD and Nerang has high rates for diabetes complications.

Service Mapping

Services	Number in the GCPHN region	Distribution	Capacity discussion
General practices	202	Clinics are generally well spread across Gold Coast; majority in coastal and central areas	∞ GP services include preparation of chronic disease management plans, team care arrangements, medication prescribing and management, health checks and plan review
Special interest general practices	23	Peppered throughout Gold Coast	∞ These practices offer only a limited range of services such as skin cancer checks, cosmetic clinics and other specific health areas
COACH and Get Healthy services, Queensland Health	State-wide programs	Free phone services	☒ Both programs focus on reducing avoidable admissions through prevention and self-management ☒ Get Healthy service provides advice and coaching on leading a healthy lifestyle by qualified health coaches ☒ COACH Program involves qualified health coaches discussing treatment with patients with a diagnosed chronic condition (e.g. medication compliance, risk factor management, follow-up appointments with physicians) ☒ Reported referrals into COACH are very low on the Gold Coast. However, limited capacity to accept new referrals
Quitline	Region-wide	Phone service	• Quitline (13 78 48) is a confidential, free service for people who want to quit smoking • Quitline counselors provide advice on setting goals to quit, and quitting methods such as nicotine replacement therapies
Diabetes and resource centre, Gold Coast Health	4	Palm Beach, Southport, Robina and Helensvale	• Focus on promoting self-management skills • Provides care, education and support for people with diabetes and their carers as well as community education (e.g. schools, community groups) • Multidisciplinary service for inpatients and outpatients • No information online regarding eligibility or access
Haemodialysis unit, Gold Coast Health	2	Robina and Southport	• Southport has 12 chronic chairs and 4 acute, focus is on end stage renal disease. • Robina has 20 chairs plus 2 self-care chairs. • In addition, there are 2 self-care chairs in which patients are cared for by Home Therapies Unit.
Rehabilitation services, Gold Coast Health	5	Robina (2), Palm Beach, Helensvale, Southport	• Rehabilitation from stroke and other conditions • Service is comprised of 40 beds at Robina, 32 beds at Southport, specialist mobile rehab assessment team, community rehabilitation program and outpatient services

Community programs, City of Gold Coast	Region-wide	Varied locations (parks, sports centres, community centres)	∞ Range of free and low-cost physical activity and healthy eating programs ∞ There is low referral to these programs from health care providers.
National Prescribing Service	National	Phone or online	∞ Free Clinical e-Audits to help GPs review prescribing for patients with certain conditions compared with best practice guidelines ∞ NPS Medicinewise have produced a free application to assist consumers with managing their medications (MedicineList+) • NPS also operate a help line to answer consumer questions about medicines
VIP Diabetes	1	Runaway Bay	• Targeted allied health and coordination for people with diabetes • Referral required from GP, self-referrals will be directed to involve GP • Home medicine review is free for people with a Medicare card and who are referred by their GP for a review • GP case conference Medicare funded • Insulin support programs are fully funded
Diabetes Queensland	2	Helensvale, Robina	• Self-referral • Targets newly diagnosed—new registration on national diabetes patient register will trigger an invite • Free to those with a Medicare card
Other private and NGO services	Various	Various	• There are a number of services offering support for people with chronic disease. • Service types include medication management and review, care coordination, care planning, self-management, allied health, nursing, respite, peer support, social and community activities. • Access is varied with many fee-for-service, some claimable through Medicare or other government avenues (e.g. DVA, aged care, disability services) • Limited information available on the demand for and outcomes of these services
My Heath for Life	State-wide programs	Currently 6 providers (may expand) and telephone option	• evidence-based lifestyle modification program provided by trained facilitators including dietitians and exercise physiologists, who have a keen interest in preventive health.

There is no public bariatric surgery available in the Gold Coast PHN region although there is a trial in Brisbane and patients from Gold Coast can access, although there is limited capacity.

Consultation

This information has been collated from various sources including: 2017 GCPHN Primary Care Opinion Survey, GCPHN Primary Health Care Improvement Committee, direct liaison with practice staff, GCPHN Community Advisory Council.

Community capacity and development

Many factors complicate one's capacity to self-manage their chronic condition including cultural barriers, homelessness, alcohol and drug use, obesity, socio-economic status, health literacy and knowledge of available support.

Stakeholders suggest that improvements in community capacity could enhance chronic disease early identification, self-management and medication management, specifically:

• More support from health professionals is required for people to manage their own health, navigate the current system and empower them to share ownership of personal health outcomes.

• Patients want support from GPs and health teams to make management decisions and goals that are realistic for their individual circumstances, moving from a medical model of care planning to a patient focussed model.

• Gold Coast Health held a community jury in June 2017 specifically focussed on the topic of obesity. The jury determined that obesity should be a priority for all key agencies, citing stigma as a key issue. In addition, collaboration was across agencies was recommended.

• Early education is required to ensure that patients fully understand the long-term nature of chronic disease and are not waiting to access services until their condition is acute.

• Clearly communicating the benefit of prevention and engaging in your health care. Many GPs use health assessments (particularly 75plus) as opportunity to raise issues such as advanced care planning, some patients may be reluctant to have health assessments because they don't see the immediate value. For people who work, they may be unwilling to prioritise a health assessment, when they don't feel unwell or have concerns, over work and other family commitments.

Service access

Stakeholders suggest that improved service access is required to ensure effective management of chronic disease, including:

• Enhanced access to chronic disease screening and early identification via age-appropriate health checks, particularly health checks for those at risk of developing cardiovascular disease and type 2 diabetes for those aged 40-49 years old. A barrier to this has been participation because individuals may not prioritise proactive health checks.

• Simplified criteria and referral pathways to enable access to chronic disease self-management courses and programs.

• Engagement with pharmacies to enhance the role they play in supporting chronic disease management.

• Eliminating cost barriers to enable patients to access care in general practice or the community, for example:

- o Some wound care clients are not able to afford treatment in the community setting and are returning back to the hospital for further follow up.
- o Limited fully subsidised chronic pain programs exist to manage pain in the community setting and prevent hospitalisations.
- o The cost of the wound management products (consumables such as particular bandages and dressings) that are used to treat the patient is a barrier to delivery of these services by general practice

Health professional capacity and capability development

Stakeholders consistently report the need for capacity and capability development amongst health professionals in the Gold Coast region relating to multidisciplinary team care approaches, collaborative planning and case conferencing.

• Chronic disease management including holistic and lifestyle approaches (as opposed to prescribing medication)

• Awareness-raising about the kinds of services already available to support people with chronic conditions

• Chronic pain and pain management (e.g. integrated care systems in primary care, referral pathways, back pain and role specific evidence-based treatment practices).

• Each professional needs to own their own gaps in service delivery, by identifying where there are gaps in their service delivery based on evidence and guidelines available and addressing the issues.

• There have been many improvements in recent years in pharmacological treatments for iron deficiency administered through general practice, education and upskilling for general practice could be required.

• The cost for the consumables for iron deficiency is a problem for general practice which can limit delivery of these services

• In the 2017 GCPHN Primary Care Opinion Survey the following were identified most frequently for future education:

- o General practitioners – Wound management, emergency medicine women's health
- o Practice nurses - Wound management, diabetes, chronic disease and COPD

Coordination and integration:

Stakeholders report that:

• Poor mental health means people are more likely to be smoking and abusing drug and alcohol so include as part of screening

• Link into existing programs like Active and Healthy

• Care coordination does not always effectively engage the person and their family. A full briefing will help to ensure information understood and actions required known.

• Service access and coordination is being hindered by suboptimal information sharing between hospital and primary care including lack of timeliness of discharge summaries and outpatients.

• Fragmentation between services at primary and tertiary levels of the health system creates difficulties for communication and information sharing between providers and also with patients. This is particularly evident in discharge planning and procedures.

• Further developments and enhancements for digital health, including data integration may improve care coordination.

• Wound care services lack clearly defined pathways, formalised linkages and information sharing between different providers.

• Chronic disease risk stratification processes could be better implemented to:
    - o target and identify patients with increasing risk of hospitalisation, particularly for diabetes complications, pyelonephritis and COPD
    - o ensure engagement and effective treatment with patients at a stage before their condition becomes acute.
    - o Pulmonary rehabilitation is an effective

System barriers

Common barriers reported by stakeholders at a system level include:

• GPs are currently not remunerated adequately for non-contact time spent planning and supporting care for patients with chronic conditions.

• Difficult to identify at risk patients through current software systems making practice care difficult.

• Case conferencing MBS items are not well utilised

• Similarly, the current Practice Nurse Incentive Payment does not sufficiently support Practice Nurses to invest time in care-coordination for patients with chronic disease.

• GP management plans have limitations, such as:
    - o plans requested for access to team care arrangement, there is limited emphasis on review to ensure goals and actions are addressed by patients
    - o plans not always individualised or patient-centred meaning that goals and actions set are not achievable or meaningful to patients.

• GPs are less engaged to lead or participate in quality improvement activities than practice nurses or practice managers. For example, feedback from general practice is that preparing for health care homes is challenging as non-clinical contact is not funded (for staff doing the work).

Gold Coast Primary Health Network

Primary Care Gold Coast (ABN 47152953092), trading as the Gold Coast Primary Health Network.

Level 1, 14 Edgewater Court, Robina 4226 | PO Box 3576 Robina Town Centre QLD 4230
P: 07 5635 2455 | F: 07 5635 2466 | E: info@gcphn.com.au | www.healthygc.com.au

"Building one world class health system for the Gold Coast."

Gold Coast Primary Health Network gratefully acknowledges the financial and other support from the Australian Government Department of Health.

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An Australian Government Initiative