

Needs Assessment Summary

CHRONIC DISEASE



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health system for the Gold Coast.”*

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GOLD COAST

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Chronic disease

Local health needs and service issues

- 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
- Need for greater focus on prevention, early identification and self-management
- Referral pathways for self-management and other service still not ideal
- Better systems to support care coordination



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.

Generally speaking, 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 pertaining 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 2015-16 was 89.3%, compared to the national average of 87.0%. This trend has improved slightly each year for the past three years, up from 88.1% in 2013-14.

The proportion of adults who reported having a long-term health condition in the Gold Coast PHN region in 2015-16 is less than the national average at 45.6% and 50.2% respectively. 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 2011-12 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 2011-12.

Table 1: Number and age-standardised rate (ASR) per 100 of people with reported chronic diseases, by type and SA3 region, 2011-12

Region	DIABETES MELLITUS		CIRCULATORY DISEASES		RESPIRATORY DISEASES		MUSCULOSKELETAL DISEASES	
	Number	ASR	Number	ASR	Number	ASR	Number	ASR
Broadbeach - Burleigh	2,381	4.4	12,837	18.9	17,814	28.4	18,087	26.8
Coolangatta	2,008	4.3	10,944	18.6	16,044	30.0	16,000	27.6
Gold Coast - North	2,885	4.9	14,317	19.3	16,419	25.9	19,797	27.7
Gold Coast Hinterland	678	4.1	3,378	17.0	5,424	29.9	5,255	26.6
Mudgeeraba - Tallebudgera	1,043	4.4	5,277	18.2	8,674	26.3	8,287	26.7
Nerang	2,521	5.3	10,699	17.9	17,418	26.2	17,294	27.4
Ormeau - Oxenford	3,238	5.1	14,642	18.5	25,729	26.1	23,659	27.0
Robina	1,576	4.3	8,776	19.1	11,964	25.3	11,862	25.2
Southport	2,465	5.8	10,427	19.0	16,471	28.8	14,768	26.1
Surfers Paradise	1,428	4.5	7,397	18.4	9,246	24.2	10,783	26.4
Gold Coast	20,224	4.8	98,694	18.6	145,203	27.0	145,793	26.8
Queensland	169,497	5.1	747,828	17.8	1,209,239	27.2	1,186,542	27.2
Australia	917,838	5.4	3,721,333	17.3	6,336,155	28.7	6,118,605	27.7

Source: Please note National Health Survey results for 2014-2015 have not been released at a local level

There are several interesting findings from this data:

- There were high numbers of people living with chronic diseases in the areas of Ormeau-Oxenford, and Gold Coast North.
- The rate of diabetes mellitus was lower than the national average in all areas except in Southport, which is markedly different to other areas.
- The rate of circulatory diseases was higher on the Gold Coast than the state and national averages in all sub-regions except one.
- The rate of respiratory diseases was high in Coolangatta and Gold Coast Hinterland.
- The rate of musculoskeletal disorders was lower than the national average in most areas.

Coronary heart disease was the leading cause of death for the Gold Coast population between 2010 and 2014 with 2,407 deaths, or 14.7% of all causes. However, The Heart Foundation analysis of data indicates (<https://www.heartfoundation.org.au/for-professionals/heart-maps/australian-heart-maps>):

- 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 1,299 deaths, or 7.9% of all causes.

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 2014-15. 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.

Table 2: Age-standardised rates of chronic disease risk factors per 100 people, by SA3 region, 2014-15

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

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 Coast 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 2016 CHO report was 11.1%, 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 is 22.8%, lower than the national average of 27.9% and lower than the 2011-2012 figure of 26%. The 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 patient data submitted by registered general practices throughout the region. As at June 2017, 118 (62%) Gold Coast practices submitted data, there was a BMI measurement recorded in PATCAT for 138,100 patients, approximately 41% of all patients in PATCAT¹. 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 28%, with almost 5% of these being morbidly obese (i.e. BMI over 40). A further 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).



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.

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 2013-14 and 2015-16.

Table 3 Number of MBS-funded services claimed for chronic disease management in general practice, Gold Coast PHN region, 2013-14 to 2015-16

MBS ITEM	2015-16	2014-15	2013-14
721 - Preparing a management plan for a patient with a chronic condition	60,932	55,647	51,606
723 - Coordinating the preparation of Team Care arrangements	54,097	48,721	44,762
729 - Contribute to a multidisciplinary care plan prepared by another health care provider	28	36	38
731 - Contribute to a multidisciplinary care plan prepared for resident of an RACF	4,474	3,448	3,820
732 - Reviewing a GP management plan	84,176	81,841	70,217

Source: Department of Human Services, Medicare Australia Statistics. Extracted 14/08/17.

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 707 GPs claimed the preparation of a chronic disease management plan in 2015-16, which represents about 93% of the roughly 760 GPs working in the Gold Coast region.

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 assessment-related occasions of service, with the exception of prolonged health assessments. Trends relating to services delivered in general practices in the Gold Coast region for health assessments between 2014-15 and 2015-16 include:

- substantial decrease in the total number of Brief Health Assessments (MBS Item Number 701) from 1,460 to 1,061 and a decrease in number of practitioners claiming this item from 135 to 111
- substantial decrease in the total number of Standard Health Assessments (MBS Item Number 703) from 6,838 to 5,006 and a decrease in number of practitioners claiming this item from 343 to 312
- decrease in the total number of Long Health Assessments (MBS Item Number 705) from 7,930 to 7,648, with an increase in number of practitioners claiming this item from 345 to 352
- slight increase in the total number of Prolonged Health Assessments (MBS Item Number 707) from 11,381 to 11,491 and an increase in number of practitioners claiming this item from 316 to 331.

Table 4 below shows that the Gold Coast had a higher rate of potentially preventable hospitalisations (PPHs) for chronic conditions when compared to Australia (1,411 vs. 1,205 per 100,000).

Table 4 Rate of potentially preventable hospitalisations for selected chronic conditions per 100,000 people, age-standardised, 2015-16

CONDITION	GOLD COAST	AUSTRALIA
All chronic conditions	1,411	1,205
Iron deficiency anaemia	294	206
Chronic obstructive pulmonary disease (COPD)	280	260
Diabetes complications	199	183
Congestive heart failure	195	211
Asthma	153	133
Angina	152	130
Hypertension	76	37

Source: AIHW analysis of the National Hospital Morbidity Database. Extracted from myhealthycommunities.gov.au on 14/08/17.

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 system

Services	Number in the GCPHN region	Distribution	Capacity discussion
General practices	180	Clinics are generally well spread across Gold Coast; majority in coastal and central areas	<ul style="list-style-type: none"> GP services include preparation of chronic disease management plans, team care arrangements, medication prescribing and management, health checks and plan review
COACH and Get Healthy services, Queensland Health	State-wide programs	Free phone services	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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
Chronic disease wellness program, Gold Coast Health	2	Robina, Helensvale or in-home or at community centres	<ul style="list-style-type: none"> Program for people with complex needs related to a diagnosis of heart failure, COPD, kidney disease or type 2 diabetes. Program usually runs for up to 12 weeks Goals is to work with GP and acute services to reduce hospital admissions and focus on self-management

Community programs, City of Gold Coast	Region-wide	Varied locations (parks, sports centres, community centres)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 Health for Life	State-wide programs	Currently 6 providers (may expand) and telephone option	<ul style="list-style-type: none"> • 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 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
- 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:
 - 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.
 - Limited fully subsidised chronic pain programs exist to manage pain in the community setting and prevent hospitalisations.

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 EBP 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.

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

- General practitioners – Wound management, emergency medicine women’s health
- 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:
 - target and identify patients with increasing risk of hospitalisation, particularly for diabetes complications, pyelonephritis and COPD
 - ensure engagement and effective treatment with patients at a stage before their condition becomes acute.
 - Pulmonary rehabilitation is an effective evidence based treatment for COPD and it is currently quite readily accessible.

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.
- 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:
 - plans requested for access to team care arrangement, there is limited emphasis on review to ensure goals and actions are addressed by patients
 - 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

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