relied upon Queensland Health in its recruitment process to verify Dr Maree's qualifications and experience, performing no independent assessment. Dr Maree was not credentialed or awarded clinical privileges, yet was allowed to practise unsupervised. Although Queensland Health, at least in the Northern Zone, appears to have taken steps to address the issues, the events in Bundaberg demonstrate that the fundamental failings in the system remain.

Part C - The Rockhampton Hospital

The City of Rockhampton

- Rockhampton, a city of 60,000, is approximately 640 kilometers north of 5.207 Brisbane.³⁰¹ The total population of Rockhampton and its surrounding districts is approximately 120,000.³⁰² Approximately 29.5% of the population is aged over 50 years, slightly higher than the state average of 28.7%.³⁰³ The indigenous population accounts for approximately 5.4% of the population, above the state average of 3.1%.³⁰⁴ In general, those two factors often result in a higher demand being placed on medical services.
- 5.208 Settled on the Fitzroy River in 1855, as a convenient port and service centre for the grazing industry, Rockhampton grew significantly with the discovery of gold in Canoona to the north and later in nearby Mount Morgan.³⁰⁵ Proclaimed as a city in 1902,³⁰⁶ the main industries in Rockhampton and the surrounding region are farming, grazing, and meat processing. The city also acts as a service centre for the mining industry located in the Bowen Basin to the west.
- 5.209 Rockhampton has three hospitals:
 - The Rockhampton Hospital, a Queensland Health facility;
 - The Mater Private Hospital Rockhampton, a 125 bed facility;
 - The Hillcrest Private Hospital, a 60 bed facility.

There is also a 25 bed Mater Private Hospital located at nearby Yepoon.³⁰⁷

The Rockhampton Health Service District

5.210 The Rockhampton Health Service District falls within Queensland Health's Central Zone and covers the Shires of Fitzroy, Livingstone, Mount Morgan, the

http://en.wikipedia.org/wiki/Rockhampton%2C_Queensland

³⁰² http://www.rockhampton.qld.gov.au/articledetail.asp 303

http://www.health.qld.gov.au/wwwprofiles/rocky.asp 304

http://www.health.qld.gov.au/wwwprofiles/rocky.asp

³⁰⁵ http://en.wikipedia.org/wiki/Rockhampton%2C_Queensland

³⁰⁶ http://en.wikipedia.org/wiki/Rockhampton%2C_Queensland ³⁰⁷ http://www.rockhampton.qld.gov.au/menuview.asp?item=8

City of Rockhampton, and part of the Shire of Duaringa.³⁰⁸ The population of the district is approximately 102,251 living over a geographical area of 20,060 square kilometres.³⁰⁹

5.211 The Rockhampton Health Service District includes: the Rockhampton Hospital, three rural hospitals,³¹⁰ and a nursing home.³¹¹ The executive staff of the District include: Ms Sandra Thompson, the District Manager; Mr David Yule, Executive Director of Corporate Services; Dr Adrian Groessler, Executive Director of Medical Services, and Mr Lex Oliver, District Director of Nursing.³¹²

The Rockhampton Hospital

- 5.212 Queensland Health classifies the Rockhampton Hospital as a large hospital, whose peers within the Central Zone of Queensland Health include the Bundaberg Hospital, the Caboolture Hospital, the Gladstone Hospital, the Hervey Bay Hospital, the Maryborough Hospital, and the Redcliffe Hospital.³¹³
- 5.213 The Rockhampton Hospital, a 227 bed facility,³¹⁴ provides a wide range of services to the local community including: General Surgery; Orthopaedics; Obstetrics and Gynaecology; Ophthalmology; Ear Nose and Throat Surgery; General Medicine; Gastroenterology; Renal Services; Paediatrics; Paediatric Cardiology/Endocrinology; Coronary Care; Outpatients Department; Neurology; Anaesthetics; Emergency; and Intensive Care.³¹⁵
- 5.214 Until recently Rockhampton also had the services of Dr John Baker a neurosurgeon who had lived and worked in Rockhampton for 16 years. Dr Baker was one of three neurosurgeons who practised in North Queensland.³¹⁶ However, for a number of reasons he moved his practice to Brisbane.³¹⁷
- 5.215 Since the 2002/2003 financial year, the Rockhampton Hospital has experienced significant growth in the demand for its services. In 2002/2003 there was a 4.1% increase in admissions and a 6.1% increase in non-admission activity.³¹⁸

³⁰⁸ www.health.qld.gov.au/wwwprofiles, viewed 3 November 2005

³⁰⁹ Queensland Health Systems Review, Final Report, September 2005, p78

³¹⁰ the Mount Morgan Hospital, the Yepoon Hospital, and the Woorabina Hospital source: <u>http://www.health.gld.gov.au/wwwprofiles/rocky.asp</u>

³¹¹ www.health.qld.gov.au/wwwprofiles, viewed 3 November 2005

³¹² As above

³¹³ Exhibit 385 para 7

http://www.som.uq.edu.au/som/CQ_teachinglocations.shtml

http://www.health.qld.gov.au/wwwprofiles/rocky_rocky_hosp.asp

³¹⁶ T3439 including Dr Eric Guazzo and Reno Rossato in Townsville.

³¹⁷ T3439 line 30

³¹⁸ www.health.qld.gov.au/www.profiles/rocky_rocky_hosp.asp

5.216 In 2003/2004 there was a further increase of 2.8% in admissions and a 4.8% increase in non-admissions patient activity.³¹⁹ 22,002 patients were admitted to the hospital that year.

Emergency Medicine in Australia

- 5.217 In Australia, emergency medicine is a recognised specialty of which the Australian College of Emergency Medicine is the specialist body.³²⁰ Emergency medicine as a discipline covers virtually all facets of medicine. The nature of emergency departments and the variety of illness and injuries that present to the emergency departments across Australia require a medical practitioner to have both breadth and depth of experience and knowledge.³²¹
- 5.218 To become a specialist in emergency medicine a medical practitioner must undergo a minimum of 7 years training in order to attain Fellowship with the Australasian College of Emergency Medicine.³²² Fellows of the College of Emergency Medicine are entitled to use the letters 'FACEM' following their name.323 When employed by Queensland Health, Fellows of the Australiasian College of Emergency Medicine are entitled to be paid as Staff Specialists,³²⁴ which attracts higher remuneration than a Senior Medical Officer 325

The Rockhampton Hospital Emergency Department

- 5.219 The Rockhampton Hospital Emergency Department is regarded by Queensland Health as a major regional emergency department, whose peers include Cairns, Nambour, Redcliffe and Toowoomba.³²⁶ The efficiency and effectiveness of the emergency department is critical to the smooth running of a hospital generally, as the emergency department is often the first point of call for many patients that are admitted to the hospital.³²⁷ During the first 11 months of the 2003/04 financial year, a total 35,735 patients attended the Emergency Department.³²⁸
- 5.220 Upon arrival at the emergency department, usually by ambulance or self presentation, patients are assessed to determine how quickly each patient needs medical attention. This assessment is to ensure that those patients requiring urgent medical attention receive it promptly, whilst those whose

³²⁷ T2240 line 50 ³²⁸ T2240

³¹⁹ www.health.qld.gov.au/www.profiles/rocky_rocky_hosp.asp

³²⁰ http://www.acem.org.au/open/documents/history.htm

http://www.acem.org.au/open/documents/overview.htm

³²² http://www.acem.org.au/open/documents/elements.pdf

³²³ Medical Practitioners Registration Regulation 2002 ss 6-8, Sch2

³²⁴ see District Health Services – Senior Medical Officers' and Resident Medical Officers' Award – State 2003

³²⁵ see s.5.2 District Health Services – Senior Medical Officers' and Resident Medical Officers' Award – State 2003 326 Exhibit 129 para 4

condition is less serious are treated later. This process of allocated priority according to clinical need is known as 'triage'. 329

- 5.221 Patients are classified on a triage scale of one to five. Triage category one are those patients whose need for medical attention is immediate, their injuries or illness being life threatening. Category one patients require treatment within two minutes. A Category five patient, by comparison, is the least urgent who ideally should receive treatment within two hours of arriving at the emergency department,330 although waiting times for well in excess of this can be common for category five patients.³³¹
- 5.222 Triage data is collected in hospitals in order to benchmark the performance of emergency departments across the State and between peer hospitals. The information regarding the time each patient waits for treatment is an important measure of emergency department performance. It reflects the efficiency of staff and also indicates whether there are sufficient staff to cope with demand.³³² However, in order to be a useful tool, the data recorded must be accurate. As discussed below, the data collected at the Rockhampton Hospital Emergency Department is inaccurate (at least the data collected in the first half of 2004).

The Emergency Department Review Report

- In 2004 the District Manager commissioned a review into the Rockhampton 5.223 Hospital Emergency Department.³³³ Dr Peter Miller, a Staff Specialist and Director of the Emergency Department at the Toowoomba Hospital, Ms Michelle McKay, Nursing Director at the Toowoomba Hospital, and Mr Tim Williams, an administrative officer at the Emergency Department of the Gold Coast Hospital were appointed to conduct the review. The Review Team visited the Rockhampton Hospital on 15 and 16 June 2004.³³⁴ The final report of the Emergency Department Review ('the Miller Report') was delivered in June 2004.
- The Miller Report did not come to the Commission's attention until it was 5.224 referred to in an article published in The Courier-Mail newspaper on 5 July 2005. It was subsequently provided to the Commission, by those who appeared on behalf of Queensland Health, later that day.³³⁵ Queensland Health had not previously provided the report to the Commission, or it seems its own solicitors, despite its obvious relevance.

³²⁹ T2240

³³⁰ As above

³³¹ Exhibit 129 page 5 shows that 79.2% of patients in Rockhampton were seen within the required time.

³³² Exhibit 129 page 4

³³³ Exhibit 129 attachment A ³³⁴ Exhibit 129 page 1 ³³⁵ T1936

- 5.225 The Miller Report identified serious problems in the operations and staffing of the Emergency Department at the Rockhampton Hospital. Firstly, it identified inadequate information management processes, including poor utilisation of the department's existing information management system.³³⁶ This affected the ability of the Emergency Department to manage and track its patients.³³⁷ The Miller report also said that data collected by the department could be utilised to improve its services. However, that data was not being so utilised.³³⁸ This failure devalued data collection in the eyes of the staff, to the point where a degree of apathy became evident as far as data collection was concerned.³³⁹ The staff were either unwilling to use the information technology provided, or did so in an haphazard manner.
- 5.226 The Miller Report also identified that the failure to appropriately use the information management tools meant that the data collected by the hospital was inherently unreliable.³⁴⁰ With respect to the hospital's published data on waiting time in the Emergency Department the data collection process:

clearly produces waiting time data that is so fundamentally flawed that it is totally meaningless. No indication of real waiting time performance can be inferred due to the \dots process³⁴¹

- 5.227 The Miller Report identified that patients were remaining in the Emergency Department for too long before being admitted to the wards within the Hospital. This delay was not as a result of access block,³⁴² but rather a delay imposed by the need for the Registrars from the various wards to assess patients in the Emergency Department before admitting that patient into the ward. Ordinarily it is the staff of the Emergency Department who perform that assessment and arrange for the patient to be admitted to the ward. However in the Rockhampton Hospital, before admission to a ward, the Registrar from that ward travels to the Emergency Department to assess the patient resulting in excessive delay. There did not appear to be any sensible explanation for this.
- 5.228 Other problems identified in the Miller Report included:
 - That the Emergency Department provided services that fell outside its core role thus draining its resources. For example the hospital's needle exchange service operated through the Emergency Department rather than through a more appropriate body.

³³⁶ Exhibit 129 pages 6-8

³³⁷ Exhibit 129

³³⁸ Exhibit 129 page 8

³³⁹ As above

 ³⁴⁰ Exhibit 129 page 6
³⁴¹ Exhibit 129 page 6

the situation where a bed is not available for a patient who requires admission to the Hospital

- The Emergency Department itself was small, crowded, and unsuited to the volume of patients attending the Department.³⁴³
- The Emergency Department's triage practices were outside accepted practice as it utilised a practice describe as 'rapid triage' followed by a later, more detailed, assessments of the patients condition resulting in duplication and wasted time.³⁴⁴
- The Director of the Emergency Department was not a member of the clinical management committee as there were no clear lines of communication. The report stated:

It is difficult to imagine how issues concerning the ED [Emergency Department] are discussed, and how the ED is involved in the broader clinical and management issues with the Division and the Hospital.³⁴⁵

5.229 However, the key findings of the report concerned the staffing of the Emergency Department.

Staffing of the Emergency Department

- 5.230 The Miller Report identified a number of problems with the staffing of the Emergency Department, concerns which are particularly pertinent as an example of the difficulties in rural and regional hospitals.
- 5.231 The senior staff of the Emergency Department comprised five Senior Medical Officers comprising the Director of the Department, three permanent employees, and one temporary employee. The Miller Report considered that without the employment of the additional temporary Senior Medical Officer, the service would fall to an unacceptable and unsustainable level.³⁴⁶ It was notable that the Department did not employ a specialist in emergency medicine, relying instead on Senior Medical Officers.
- 5.232 The junior medical staff of the Emergency Department comprised seven Principal House Officers, three Resident Medical Officers and three Interns. The supervision of the junior medical staff was inadequate for a number of possible reasons:³⁴⁷
 - Inadequate staffing numbers;
 - The heavy personal case load of Senior Medical Officers;
 - The senior staff concentrating their supervision on the underperformers at the expense of the good performers;

³⁴³ Exhibit 129 pages 8,9,18

³⁴⁴ Exhibit 129 pages 7 and 10

³⁴⁵ Exhibit 129 page 17

³⁴⁶ Exhibit 129 page 12

³⁴⁷ Exhibit 129 page 13

- A cultural issue within the department that does not foster close clinical supervision of junior doctors as a high priority goal; or
- Lack of confidence of the Senior Medical Officers in their own clinical abilities.
- 5.233 The staffing mix of the Emergency Department was highly variable. Many of the staff were not performing at a level consummate with their employment classification. Indeed, according to the Review Team the situation often arose that staff on lower pay scales were required to 'supervise' staff on higher pay scales.³⁴⁸
- 5.234 There was a perception within the hospital staff that the Emergency Department was used as the Hospital's 'dumping ground' for underperforming doctors so that they could be 'managed' there.³⁴⁹
- 5.235 Many of the junior medical staff were overseas trained. According to the Miller Report a recurrent theme of the evidence gathered by the Review Team was that the medical knowledge and competencies of a large proportion of the overseas trained doctors within the Emergency Department was inappropriate for the level of practice required in the Emergency Department. In some, the level of English competency was poor to the point of affecting their ability to practise medicine.³⁵⁰
- 5.236 The absence of a specialist in emergency medicine adversely affected staff recruitment and retention as well as the standard of clinical care.³⁵¹ The absence of specialists in emergency medicine also meant that the Emergency Department was not accredited for training purposes by the Australasian College of Emergency Medicine. Non-accreditation directly impacts on staffing as without accreditation the Emergency Department cannot employ training registrars. That had the following adverse effects:³⁵²
 - There was no specialist role model for junior staff;
 - There was no culture of ongoing professional development amongst the medical staff;
 - There was no incentive for registrars of other disciplines to spend time in the department because their time there would not count towards training in their relevant specialty;
 - There was no prospect of recruiting or retaining staff who may wish to pursue a career in emergency medicine.

³⁴⁸ Exhibit 129 page 13

³⁴⁹ Exhibit 129 pages 13-14

³⁵⁰ Exhibit 129 page 14

³⁵¹ Exhibit 129 page 14

³⁵² Exhibit 129 page 14

All of these factors lead to poor performance of staff generally.

5.237 Perhaps related to the problems with staffing issues identified above, the Review Team was particularly concerned about the Emergency Department's use of the hospital's Medical Emergency Team. A Medical Emergency Team exists to provide a rapid, skilled medical and nursing response to previously agreed and defined ward based emergency situations.³⁵³ Ordinarily Medical Emergency Teams do not respond to calls in a hospital's emergency department.354 That department should, ordinarily, have the skills and expertise to manage an emergency situation without calling on outside assistance. However, due to what was described as chronic underperformance of the Emergency Department in fulfilling its core duties, the Emergency Department seemed to be regularly in need of the services of the hospital's Medical Emergency Team to care for patients that the Emergency staff should have been able to care for. The report described this practice as 'worrying in the extreme'.³⁵⁵ It said:

If the ED [the Emergency Department] cannot perform the service and has to call on emergency response from staff outside the department on a regular, systemised basis it reflects a deficit in ED capacity or skill mix that needs urgent attention. 356

- 5.238 The Miller report made a number of recommendations concerning the procedures in the Emergency Department including:³⁵⁷
 - improvements to data collection and management practices,
 - refocusing of the department's services on its core functions,
 - education and performance management for staff, and
 - improvements to triage practices.³⁵⁸
- 5.239 In respect of staffing of the Emergency Department the Miller Report recommended:³⁵⁹
 - That as a priority the Emergency Department and the Rockhampton Health Service District be accredited by the Australasian College of Emergency Medicine as an advanced training facility for Emergency Medicine;
 - The Emergency Department employs a minimum of four full time Fellows of the Australasian College of Emergency Medicine (or deemed

³⁵³ T2241

³⁵⁴ Exhibit 129 page 8

³⁵⁵ Exhibit 129 page 8

³⁵⁶ Exhibit 129

³⁵⁷ Exhibit 129

³⁵⁸ Exhibit 129 pages 1-2

³⁵⁹ Exhibit 129 page 2

specialist equivalent). This is necessary to provide a stable sustainable quality service. By creating a 'critical mass' of specialist emergency staff there would be flow on effects of raising the standard of clinical care and supervision, improving the status of the emergency department in the hospital and community;

- As an interim measure until the department can attract and recruit registered emergency specialist staff, the review team recommended that the department seek to establish formal links with either individual emergency specialists on contract or another accredited emergency department.
- 5.240 Partly in a response to those recommendations, the Rockhampton Hospital employed Dr William Kelley, an American trained specialist in emergency medicine who had 25 years experience in emergency medicine in the United States.

Dr William Kelley

- 5.241 Dr Kelley trained at The John Hopkins Medical Centre in Baltimore, a world leading training centre in emergency medicine.³⁶⁰ Upon completion of his training, rather than taking up an offer of a teaching position, Dr Kelley chose to work at a large trauma centre in the Lehigh Valley, about 90 minutes from New York. He also worked as Director of Emergency Medicine in a rural hospital in Pennsylvania for 15 years where he supervised three doctors.³⁶¹
- 5.242 In the United States, emergency medicine specialists must undertake examinations (every ten years) to demonstrate their continued competence.³⁶² Dr Kelley had completed those examinations on two previous occasions, the latest occasion being in 2004.³⁶³
- 5.243 In March 2005, Dr Kelley moved to Rockhampton with his wife and children to work at the Rockhampton Hospital.³⁶⁴ Within weeks of commencing duties at the Rockhampton Hospital Dr Kelley had serious concerns about the operation of the Emergency Department.³⁶⁵ He brought those concerns to the attention of the Rockhampton Hospital's Executive who advised him that they were aware of the problems and provided him with a copy of the Miller Report. Dr Kelley was informed that the Miller Report was confidential and had not been released to the public.³⁶⁶

³⁶⁰ T2236 line 34

³⁶¹ T2236 line 55

³⁶² T2236

³⁶³ T2237 line 1

³⁶⁴ Dr Kelley obtained his position by way of a medical recruiter, Global Medical Services see T2237

³⁶⁵ T2238 line 16

³⁶⁶ T2238 line 30

- 5.244 In Dr Kelley's opinion, and the evidence that he gave to the Commission, it seemed that by the time of his arrival in March 2004, little progress had been made in implementing the recommendations of the Miller Report. The staffing of the Emergency Department remained inadequate and he felt that patient safety was being compromised.
- 5.245 Dr Kelley considered that there continued to be poor utilisation of information technology resources within the Emergency Department.³⁶⁷ Internet access at the Hospital was not standard issue to all clinicians.³⁶⁸ This he found surprising because he considered internet access as an essential clinical tool, where, for example, he could compare medications used in the American system with the English system.³⁶⁹
- 5.246 More particularly, Dr Kelley said that the Department's existing information management system, referred to in the Miller report, was cumbersome and out of date. He noted that the Department was introducing a new system. Although the new system and the existing system did assist in the collection of important data, they did not serve a function which he considered much more clinically relevant and in much more urgent need of address, patient charting.³⁷⁰
- 5.247 Dr Kelley sought to introduce a computerised system of charting that allowed clinicians to chart patient histories, examinations, and other information, which he believed would improve teaching and the movement of patients through the Emergency Department.³⁷¹ Dr Kelley said that by improving the efficiency of the Emergency Department, often being the first point of contact between patients and the hospital, there could be flow on effects to the rest of the hospital. However, when he suggested that new system he was told that the Rockhampton Hospital did not have any money for it.³⁷²
- 5.248 Dr Kelley complained that there were no radiologists in the Rockhampton Hospital at all. Dr Kelley considered radiologist support as essential to the practice of emergency medicine.³⁷³
- 5.249 Most significant were Dr Kelley's observations as to the state of staffing in the Emergency Department almost one year after the Miller report was completed. He said that while he worked there the Department had a large number of junior doctors and many of the Hospital's overseas trained doctors were concentrated in the Emergency Department.³⁷⁴ Indeed, while Dr Kelley was

- ³⁶⁸ T2239
- ³⁶⁹ T2240
- ³⁷⁰ T2239, T2240 ³⁷¹ T2239, T2240
- ³⁷² T2240
- ³⁷³ T2244, T2245
- ³⁷⁴ T2241, T2243

³⁶⁷ T2239, line 20

there, the core medical staff of the Department were all overseas trained.³⁷⁵ Dr Kelley felt that because there was no one at his level of experience in the Department he constantly had to 'baby sit' staff because he felt they were not capable of performing their role independently and patient care was suffering.³⁷⁶

5.250 Dr Kelley confirmed that during his period at Rockhampton the practice of using the Medical Emergency Teams to support the Emergency Department was continuing, which he agreed was worrying in the extreme.³⁷⁷ He commented:

The problem is that in a well run Emergency Department, the emergencies are handled by the doctors in the emergency room. In Rockhampton, the talents of the people who are present [in the Emergency Department] are so lacking that the emergency room has depended on having doctors come from other parts of the hospital when an emergency happened.

In Rockhampton, not only do they not have specialists in the emergency room, but they rely on doctors in other parts of the hospital to respond to critical care.³⁷⁸

- 5.251 When Dr Kelley arrived and realised the problems he faced, he approached the Executive and offered to contact senior doctors from around the world in places such as England, South Africa, New Zealand and the United States to join the Rockhampton Hospital's Emergency Department. However that offer was not accepted. Indeed a representative from Global Medical Services, the company that had placed him in Rockhampton, contacted him and indicated that the company had two candidates in the United States willing to come and work in Rockhampton.³⁷⁹ However, when he informed the executive, it advised that the Hospital would not accept any applicants through Global Medical Services.³⁸⁰
- 5.252 Dr Kelley recommended to the Executive that, rather than employ a large number of junior doctors in the Emergency Department, the hospital should reallocate its funds so that it employed senior doctors instead. However, that suggestion was never acted upon.³⁸¹

General comments on Rockhampton

5.253 While some progress has been made with respect to implementing the recommendations of the Miller report, the evidence received about the lack of progress at the Rockhampton Hospital is symptomatic of a range of issues

³⁷⁵ T2243

³⁷⁶ T2243

³⁷⁷ T2241

³⁷⁸ T2241 line 33 ³⁷⁹ T2242 line 25

³⁸⁰ T2242 III

³⁸¹ T2243, T2244

facing public hospitals in Queensland, particularly those outside of the southeast corner such as:

- Either an inadequacy in funding or a reluctance by administration; or both
- Difficulty in attracting and retaining sufficient specialist staff to provide an adequate and safe service;
- A lack of sufficient specialist staff to create a 'critical mass' of practitioners within a hospital.
- A tendency to use Senior Medical Officers instead of recognised specialist staff;
- Inadequate supervision of junior staff, both Australian and overseas trained;
- An excessive number of inadequately qualified overseas trained doctors
- Consequently, a lesser standard of medical treatment in rural and regional public hospitals

Part D – The Prince Charles Hospital

Cardiac care at Prince Charles Hospital

- 5.254 The Prince Charles Hospital, located at Rode Road, Chermside, Brisbane is within the Prince Charles Hospital Health Service District (Central Zone). The District includes the City of Brisbane north of the Brisbane River and the Shire of Pine Rivers but excludes the Royal Brisbane Hospital complex, the Royal Womens Hospital complex, the Royal Childrens Hospital complex, the Queensland Radium Institute, and integrated adult mental health services associated with the Royal Brisbane Hospital.³⁸²
- 5.255 The hospital provides quaternary and supra-regional cardiac services, including Cardiac Surgery and Cardiology (including paediatric cardiac), quaternary and supra-regional thoracic services, orthopaedic surgery, rehabilitation and geriatric respiratory medicine, adult mental health and palliative care. The District provides health services to residents living in the northern suburbs of Brisbane and specialist services to the broader Queensland and Northern New South Wales population.

³⁸² www.health.qld.gov.au