

APPENDIX I

South Auckland facilities

South Auckland Health provides secondary care for the people of Counties Manukau. The main services provided are summarised below. Detailed information is provided in the Services Directory. This is currently available on Southnet (the internal SAH network), as a publication for health professionals, and will be made more available on line soon. South Auckland Health's catchment area for medical, surgical, gynaecological and paediatric referrals in broad terms covers patients permanently residing south of Portage Road, Otahuhu and within the boundaries of Manukau City, Papakura District and Franklin District (see Environment section). In-patient services are provided at the following facilities: Middlemore Hospital, Otara Spinal Unit, Papakura Obstetric Hospital, Franklin Memorial Hospital, Pukekohe Hospital and Botany Downs Maternity Unit. Outpatient services are run at Botany Downs and Manukau SuperClinics™ as part of the ambulatory care service. Day case surgery is provided at the Manukau Superclinic™.

Geographic placement of health facilities

Despite being at the northern end of South Auckland, the Middlemore site is surprisingly close to the majority of the Counties Manukau population.

Table 1. Counties Manukau 1996 population within specified distance of site
(Percentage of total Counties Manukau population)

Site	Distance by road from site			
	5 km	7.5 km	10 km	12.5 km
Middlemore site	100 261 28%	136 663 39%	198 172 56%	247 602 70%
Browns Road site	105 130 30%	133 567 38%	191 874 54%	224 250 63%
Above sites combined	179 163 51%	198 398 56%	239 161 68%	275 377 78%
Outside distance from either	174 841 49%	155 606 44%	114 843 32%	78 627 22%
Total	354 004	354 004	354 004	354 004

Notes

- 1 Distances measured to centre of each census area unit (CAU) by road access (as opposed to a simple radius "as the crow flies"). Census96 usually resident populations, including Otahuhu are used. Under-enumeration is difficult to include at the CAU level, so the total population here is 354 000 rather than the possibly expected 366 600.
- 2 'Combined' refers to the population living within range of either Middlemore or Browns Road. The two sites are around 8 km apart, so there is considerable overlap, particularly at the 10 and 12.5 km levels. 'Neither' refers to those areas outside the designated range from both sites. Note that almost all of Franklin District falls into this category at all distances.
- 3 At the 12.5 km level a number of other areas such as Bucklands Beach and Cockle Bay out to Beachlands, Maraetai and Clevedon remain in the 'Neither' category.

At the year 2021 this situation is projected to be relatively unchanged.

Table 2. Counties Manukau 2021 projected population within specified distance of site
(Percentage of total Counties Manukau projected population - medium fertility, migration and mortality assumed)

Site	Distance by road from site			
	5 km	7.5 km	10 km	12.5 km
Middlemore site	120 592 24%	210 308 41%	301 740 59%	371 340 73%
Browns Road site	168 141 33%	201 468 39%	305 942 60%	350 200 69%
Combined sites	256 996 50%	309 978 61%	368 252 72%	411 537 81%
Outside distance from either	253 804 50%	200 822 39%	142 548 28%	99 263 19%
Total	510 800	510 800	510 800	510 800

See Tables 3 and 4a for methodological notes.

Note that -

- presently and into the future, around 70% of all South Auckland people (and in fact around 80% of all South Auckland “urban” residents, therefore including its more ‘needy’ residents) live within 12.5 km road distance of Middlemore¹; and
- by 2021 the Middlemore and Browns Road sites would appear to be essentially equivalent in population coverage terms.

Medicine

The specialities of Medicine provided by South Auckland Health are cardiology; clinical haematology; diabetes, metabolic medicine, gastroenterology and hepatology, infectious diseases, internal medicine, neurology, palliative care, renal, respiratory and rheumatology.

Surgery

The specialities of surgery provided by South Auckland Health are breast surgery, audiology, ear, nose and throat, general surgery, ophthalmology, oral health, orthopaedics and plastic and reconstructive surgery. Urology services are starting this year.

Services for the elderly

Services are provided through (i) inpatient assessment, treatment and rehabilitation, (ii) community assessment and rehabilitation and (iii) outpatient clinics. There is a close working relationship between mental health services for the elderly and general services.

Women's health

Middlemore Hospital, Botany, Papakura and Pukekohe maternity units provide a comprehensive maternity and neonatal services for normal and complicated pregnancy care. These services are part of a general hospital with expertise from other specialities available on site. Childbirth education classes offer a six-week preparation for childbirth. There is also a one-week refresher course. A whole range of maternity care is provided ranging from care for low risk mothers closer to home to care for those with high risk pregnancies as in-patients. A maternal mental health service is also available.

¹ A more detailed explanation of this latter point is available in *The Population Of South Auckland*. Jackson G, unpublished planning paper, June 1999.

A range of services are provided dealing with common gynaecological conditions. Terminations of pregnancy are not generally provided by South Auckland Health.

Mental health

This is a specialist mental health service designed to target the population with severe mental illness. Mental health provides a range of multi-disciplinary assessment, treatment and rehabilitation services, inpatient and community settings to children, adolescents, adults and elderly (covered further in Chapter 11 Mental health, page 219). Urgent assessment and crisis intervention is integrated into Adult Mental Health Services. Child and adolescent services are provided from Campbell Lodge in Mangere – see Chapter 10 Child health, page 216.

Rehabilitation

The neurological rehabilitation services at SAH provide assessment and treatment services for the physically disabled residents of the SAH catchment area. It provides services to individuals between the ages of 16 to 65 years. The service operates as a multi-disciplinary team and the team has particular expertise in the field of strokes, head injuries as well as other neurological conditions such as multiple sclerosis. Psychogeriatric patients are also managed under the rehabilitation services.

Oral health

The oral health unit is part of a regional service providing a range of oral health care services in various settings from primary care through to complex multi-disciplinary tertiary care. Complex care aims to maintain or restore function to the hard and soft tissues of the mouth and its supporting structures. Not all services are free of charge and most are part charges apply to primary and secondary care patients.

Kidz First Children's Hospital and Community Health

Delivery of the following:- acute comprehensive neonatal services; assessment and inpatients paediatric services; ambulatory services; child development and therapy services; community/school child health services; specialist youth services and child and family mental health services. The Centre for Youth Health deals with adolescent health issues – see Chapter 10 Child health, page 216.

Cultural services

Te Matapuna Rapuora (Maori Health Services) include a whanau support service. This service includes cultural needs and support assessments, health education and promotion, discharge plan management, Maori Cultural Resource Services to staff, development participation in integrated care. Outpatient whanua support, and paediatric DNA (did not attend) follow up. Emergency accommodation is provided for families wanting to be near their relatives.

Pacific Health provides training in cultural competency for staff and are involved in the development of policy and strategies affecting Pacific people. The Pacific Health unit provides information, assistance and support to Pacific families. In addition Pacific Health provides interpreting and translation services as well as specific mental health and paediatric services to Pacific peoples. The paediatric services are run by Pacific doctors, nurses and community health workers, there is an outreach clinic and home visits are also available.

Acute allied health

The acute allied health team at Middlemore Hospital provides both inpatient and outpatient services and is made up of staff from the following disciplines: Occupational Therapy, Physiotherapy, Social Work and Speech-Language Therapy. Outpatient services include disease specific and speciality clinics. Pain management, back care management and work place visits are not provided.

Home Health Care

Home Health Care is an interdisciplinary service that forms part of the community health services of South Auckland Health. The service covers Mangere to Mercer with four community based sites located at Howick, Orakau Road Mangere, Papakura and Pukekohe. The service is available to people in their own home or clinical care is provided based on assessment of need. These services include asthma education, dietary, occupational therapy, physiotherapy, social work and speech and language therapy.

Laboratory

The Laboratory services provided include routine and specialised blood tests; microbiology of swabs and fluids; histopathology; fine needle aspiration cytology; drug screening; semen analysis; mantoux tests and a travel vaccination service.

Radiology

The radiology services include a 24 hour service for plain films, barium studies, computed tomography, ultrasound, mammography, fluoroscopy, intravenous urography, vascular and interventional radiology, MRI and nuclear medicine for ACC patients.

Pukekohe Hospital and Franklin Memorial Hospital

These are described in Chapter 12 Disability, page 237.

APPENDIX II

Auckland regional services

Bone marrow transplant services

Allogeneic and autologous bone marrow transplants are provided by Auckland Healthcare. In 1999 there were five allogeneic transplants and six autologous transplants performed on South Auckland residents. Centres doing more than five procedures a year are thought to have better outcomes than centres doing less than five².

Cardiothoracic surgery

Cardiothoracic surgery is carried out at Greenlane Hospital for Auckland residents, up to and including heart transplants. Coronary artery bypass grafts account for about 70% of all cardiac procedures performed on patients aged 50-74 years. In New Zealand CABGs are undertaken in public and private hospitals. Estimates of the total numbers of CABG's being done in 2000 in Auckland were 331 in the private sector and 490 in the public sector. At a recent hearing on cardiac services New Zealand doctors agreed that an individual surgeon should perform at least 75 CABG's in a total of 100 open heart operations per year.

Renal transplant services

Renal transplants are provided by Auckland Healthcare. The number of renal transplants performed depends on the number of donors available. Usually there are not enough organs to meet the demand for transplants.

Adult liver transplant services

Adult liver transplants are provided by Auckland Healthcare. Child liver transplants are carried out in Australia. The number of liver transplants has slowly increased since 1990. In 1999 a total of 25 transplants were undertaken, with 3 being on South Auckland residents.

Neurosurgical services

These services are provided by Auckland Healthcare. There were an estimated 931 procedures performed in 1993/4, of these 751 were estimated to be major.

Plastic surgery

South Auckland Health provides a regional service in plastic surgery, including burns and hand surgery. The catchment area for this service covers the region from Mercer to Cape Reinga.

Radiotherapy and oncology (medical cancer) services

These services are provided by Auckland Healthcare.

² New Zealand Bone Marrow Transplant Study Group. Bone Marrow Transplantation in New Zealand. Bone Marrow Transplantation. 1994;13:733-736.

Spinal cord injury rehabilitation services

These services are provided by Otago Spinal Unit in South Auckland. In 1999, 31 South Auckland residents were admitted to the centre. See Chapter 12 Disability page 236 for more on the Otago Spinal Unit.

Audiology

Auckland Healthcare Audiology Services provide extensive audiological diagnostic assessment, rehabilitation and habilitation services to both children and adults within the Central Auckland region. The National Audiology Centre (NAC) is situated in Remuera and provides a broad range of clinical audiology services including

- Hearing assessments, especially of infants and preschool children (under 4 years, or older with special problems).
- Specialised hearing tests (eg babies).
- Hearing aid fitting for children and adults.

The NAC is also the base of the New Zealand Cochlear Implant Programme. Set up in 1986, to June 2000 105 children and 78 adults have been implanted.

Newborn screening

The National Testing Centre provides the newborn screening service for the whole of New Zealand. Neonatal screening for congenital metabolic disorders began in New Zealand in the mid-1960's and was established as a national program by the late Professor Arthur Veale and Professor Bob Guthrie in 1969. Seven conditions are screened for – phenylketonuria (PKU), hypothyroidism, adrenal hyperplasia, biotinidase deficiency, galactosaemia, cystic fibrosis and maple syrup urine disease (MSUD). This is one of the most highly cost-effective programmes in medicine.

New Zealand screening tests and incidence of screened conditions.

Condition	Test	Incidence
PKU	Guthrie BIA	1:21 250
MSUD	Guthrie BIA	1:196 600
Biotinidase deficiency	Wolf colorimetric	1:91 400
Galactosemia	Hill-Misuma	1:132 900
Congenital hypothyroidism	Delfia TSH	1:4 680
Congenital adrenal hyperplasia	in-house RIA	1:25 400
Cystic fibrosis	2 tier Delfia IRT / 3 genes	1:3 590

Note: Incidence based on actual NZ screening experience. For abbreviations see text.

Clinical genetics

Clinical genetics is an outpatient-based service operating out of Auckland Healthcare. A field growing at a tremendous pace, Auckland (and New Zealand) is dramatically underserved by clinical geneticists. For example there is only one clinical geneticist in Auckland where there should be a minimum of 3, and if Australian ratios were used around 5.