

**Counties Manukau
District Health Board**

**Plastic and Reconstruction Services
Health Services Plan**

February 2008

1.0 Current Services

The Plastics and Reconstructive Service (PRS) at CMDHB is one of the four regional plastic surgery centres in New Zealand and provides services to Counties Manukau, Auckland, Waitemata and Northland DHBs. Regional Plastic Surgery Units are situated in Canterbury DHB, Hutt Valley DHB and Waikato DHB. Service is provided in a Hub and Spoke model to the other Northern region DHBs for secondary and tertiary care.

Service provision includes both elective and acute secondary/tertiary services for adults and paediatrics within the region (currently 1.5 million residents). There is a small volume of referrals from other regions. In 2006 CMDHB opened the National Burns Centre (NBC) at Middlemore Hospital and assumed responsibility for the management of major burns for New Zealand. In addition, the CMDHB PRS has regional responsibilities around Hand Service provision. In March 2008 Waitemata DHB will be assuming responsibility for all secondary care hand surgery with tertiary hand surgery remaining with CMDHB.

The CMDHB Plastic and Reconstruction Service provides the full spectrum of Plastic and Reconstructive general and subspecialist interests including:

- Breast Reconstruction
- Cleft Lip/Palate Surgery
- Craniofacial Surgery
- Head and Neck Surgery
- Hypospadias Surgery
- Maxillofacial Surgery
- Oculoplastic Surgery
- Skin Cancer Surgery
- Vascular Anomalies
- Burns Surgery
- Hand Surgery

Primary care providers the major referrers to the PRS (97.4%). In the CMDHB catchment, GPs are required to undertake punch biopsy prior to referring patients with suspected malignant skin lesions to the PRS service. The PRS sub-contracts a proportion of Counties Manukau residents for low-complexity skin lesion surgery provided by GPs with Specialist Interest (GPwSI) and similar practice is followed by other DHBs.

Most inpatient, daypatient and outpatient specialist PRS services are provided by the CMDHB PRS team at Manukau SuperClinic (MSC) and Middlemore Hospitals. Regular operating sessions are undertaken by CMDHB clinicians at Auckland Hospital (8 per 8 weeks), North Shore Hospital (4 per 8 weeks), and Starship Hospital (8 per 12 weeks) to support collaborative approaches with local specialists at these facilities.

Many complex paediatric cases are carried out at Starship Children's Health as there is a comprehensive range of paediatric clinical support readily available. Members of the PRS service also regularly carry out joint procedures (including head and neck surgery, and breast surgery) with surgeons at Auckland City Hospital and North Shore Hospital respectively.

A resident Plastics and General Surgeon in Northland provides a range of general plastic procedures for NDHB residents.

CMDHB provides most of the publicly funded Plastics services within the Northern Region with the exceptions being some low complexity paediatric procedures and skin lesions, performed in primary care, and some cases performed at Northland DHB by a resident plastic surgeon. The budgeted resource of senior medical staff (SMOs) at CMDHB is comparable to other regional units. Recruitment and retention have been challenged by the disproportionately high rate of acute presentations and this has resulted in ongoing resourcing issues. This is largely accounted for by the regional model whereby all hand injuries are referred to the PRS rather than managed locally by secondary care hand services.

The CMDHB Plastic service performs inpatient and day patient elective procedures at Manukau Campus and more complex surgery at Middlemore Hospital. Additional lists are performed at other hospitals in conjunction with other surgical specialties and formally recognised as outreach sessions.

Each eight-week period, 28 sessions are provided by CMDHB clinicians as outreach sessions. The cases completed during these sessions are considered as base volumes of the DHB in which the patient is treated.

An acute service is provided from Middlemore Hospital 24/7. The provision of acute services in Plastics is challenged by high volumes of hand surgery acute patients, highly variable presentation rates of major burns (with major theatre and PRS staff commitment when they are receiving in-hospital care), and general plastic acutes.

The PRS also runs an Emergency Centre Local Anaesthetic Outpatient Procedure (ECLAOP) service at Middlemore's Emergency Department (ED) to cater for those procedures that require local anaesthetic as outpatients and thus do not require access to the main operating theatres.

The CMDHB PRS currently has six Royal Australasian College of Surgeons approved advanced surgical trainees and six basic surgical trainees who undertake clinical research projects under the supervision of the Unit's SMOs.

CMDHB is working with the University of Auckland with the aim of re-establishing an academic appointment for a suitable applicant.

2.0 Key Issues

Population Growth

High rates of population growth in Counties Manukau and in other part of the region, will increase service demand. Service development and configuration will use this growth to offset the loss of volumes as secondary care services at WDHB and ADHB develop.

Acute Hand and Plastic Surgery

The high volume of acute hand presentations for Plastic/Hand Surgery creates challenges for both recruitment and retention of SMOs and RMOs. Service provision has been challenged by shortages of staffed acute theatre sessions with resultant delays to patients.

Regional Service Provision

CMDHB has struggled to provide contracted levels of services due to ongoing resource issues. This has limited service development to include collaborative surgery with other specialties, and this can adversely affect the services available to patients in other DHBs (e.g. access to breast reconstruction at the time of cancer surgery is limited for women having their cancer surgery outside CMDHB).

Workforce

The recruitment of Plastic and/or Burns surgeons has been significant but continues to be challenging. In addition workforce challenges include the need to train specialist nurses and allied health staff into Plastic and Burns Surgery.

National Burns Unit

CMDHB has provided the National Burns Unit since 2006 but is not yet sufficiently resourced to accept all major burns referrals from around New Zealand. Nursing and allied health staff numbers are now adequate and with growing ICU bed numbers in mid-2008, the National Burns Unit will increasingly be able to accept national referrals. The shortage of Specialist Burns Surgeons needs to be addressed.

3.0 Trends and Future Directions

The Northern Region is currently engaged in a Regional Service Planning Process involving WDHB, NDHB, ADHB and CMDHB which will be completed by mid-2008.

The project aims to ensure effective, safe, efficient secondary and tertiary PRS within the Northern region. The purpose of the regional project is to take a long-term strategic approach that may be phased in on an incremental basis, depending on the final solution.

At the time of preparing the CMDHB HSP the region has supported the “hub and spoke” model in the short/medium term, with CMHB continuing to provide tertiary and upper level secondary care PRS in the long term. The detail of developments is still to be worked through.

Subject to the outcome of the RSP process currently underway, the PRS will increasingly be developing a “Hub and Spoke” configuration for the Northern Region with devolution of “shared” procedures and increased outreach service by the CMDHB Plastics unit. CMDHB will retain the National Burns Unit and tertiary services will remain at CMDHD in the foreseeable future. Services at CMDHB facilities will continue to be provided at both Middlemore Hospital and the Manukau SuperClinic short, medium and long term.

Devolution of secondary care hand surgery to Waitemata will be completed in April 2008. Further discussion is required with ADHB to explore the opportunity for ADHB to develop further capacity to take on ADHB secondary care hand surgery. In February 2008 CMDHB commenced the provision of hand surgery First Specialist Assessment (FSA) at Greenlane Clinical Centre, with a view to commencing day stay surgery at Greenlane Clinical Centre when theatres are available.

Specific features of the model are as follows:

- **Burns:** Centre of Excellence (COE) based at CMDHB (NBU) with retention of minor burns at DHB of domicile. Paediatric burns will continue to be provided at Middlemore Hospital with paediatric ICU support.
- **Head and Neck Reconstruction:** Reconstructive Centre of Excellence will continue based at Auckland City Hospital, supported by the CMDHB PRS. There will be limited further development of this service at CMDHB.
- **Breast Reconstruction:** Lower complexity reconstructive plastic surgery of the breast to be provided at each centre dealing with breast cancer i.e. DHB of domicile. Comprehensive breast reconstruction will continue to be provided by the CMDHB surgeons.
- **Congenital Hands:** Services are currently available at SSH and Middlemore. No expansion beyond these locations anticipated.
- **Hypospadias:** Middlemore will continue to deal with Counties Manukau residents with other cases being managed at Starship.
- **Craniofacial:** (includes cleft services, ear reconstruction etc) to be based and provided at SSH. Adult services to be based at ACH where Neurosurgery is provided for the Northern Region. Low level trauma can be dealt with at DHB of domicile. Maxillofacial services will continue to share interface cases.
- **Hands (Adult):** NDHB, ADHB and WDHB will develop local orthopaedic services to manage acute and elective secondary care hand surgery locally with referral of tertiary hand service patients to CMDHB as appropriate. CMDHB will continue to provide a combined plastic/orthopaedic Hand Service as part of the CMDHB PRS service.
- **General Plastic Surgery and Complex Skin Cancer Surgery:** Local general and plastic surgery services will develop in each of the regional DHBs with major reconstructions being referred to CMDHB. Where appropriate General Practitioners will continue to undertake removal of minor skin lesions.

In the long term, ADHB and WDHB will be expected to develop secondary care general plastic surgery services with growth of specialist plastic surgery services for children developing at Starship Hospital.

Acute Service Provision – Hand Surgery

The high number of acute presentations currently being managed at MMH is problematic. Many of these patients have secondary care conditions that could be appropriately managed in local DHBs by Orthopaedic Surgeons (principally hand surgery and soft tissue injury), General Surgeons or Physicians. While many patients currently being managed by the Hand Service (within the PRS) will be managed by WDHB in March 2008 (rather than by the CMDHB Hand Surgery Team), there will still be many patients being managed by the PRS service for general plastic conditions who could be managed locally. Management of many of these conditions will move to local management by December 2009 including:

- Pretibial flap lacerations requiring suturing or grafting to be managed by general surgery/orthopaedics at DHB of domicile.
- Facial abscess/infections can be dealt with by General Surgery/ORL at DHB of domicile.
- Debridement of necrotising infections e.g. necrotising fasciitis, pressure sores to be managed by General Surgery/ Orthopaedics at DHB of domicile, CMDHB PRS will provide reconstruction services where required.

Workforce

Recruitment of Plastic Surgeons is internationally difficult and there is growing unwillingness amongst all specialist groups to be involved in any onerous rosters.

Plastic Surgeons in New Zealand generally have a public/private mix and the fulltime public surgeon is uncommon. A substantial requirement for acute service provision necessitates having a large number of specialists if a timely service is to be provided. This needs to be taken into account with any planning process for long term service provision.

There is an international shortage of Burns Surgeons. CMDHB currently has two Burns Surgeons and needs a minimum of three/five to service the National Burns Centre. Further recruitment is underway with most Burns Surgeons operating as both Burns and General Plastic Surgeons.

Employment of future Plastic Surgeons who will provide services in the “spokes” is subject to discussion through Regional Service Planning i.e. whether they are employed by CMDHB or the DHB of domicile. If Surgeons were to be employed by the DHB of domicile they would continue to participate in the tertiary acute roster managed by CMDHB.

4.0 Key Directions

- ✓ *WDHB will be providing a secondary care hand surgery service for WDHB residents from March 2008.*
- ✓ *CMDHB to explore with ADHB the development of capacity to manage ADHB residents requiring secondary care hand surgery.*
- ✓ *CMDHB is promoting enhanced outreach services to WDHB and ADHB in the short term with phased development of secondary care Plastic Surgery Units in ADHB and WDHB at some time in the future.*
- ✓ *CMDHB will continue as the provider of regional tertiary PRS for the foreseeable future.*
- ✓ *Developing of resource capacity within the National Burns Unit to ensure capacity to accept all nationally referred and Tahitian major burns.*
- ✓ *Development of Specialist Nursing Roles to integrate patient care and enhance service provision.*