Counties Manukau District Health Board

Respiratory Health Services Plan

February 2008

1.0 Service: Current State

The CMDHB Respiratory Service provides assessment advice and management of respiratory patients in inpatient, outpatient and ambulatory care settings including:

Inpatient Services

- Inpatient care through the multidisciplinary team (Ward 7)
- Assessment and advice on inpatient management
- Bronchoscopy services
- Endo-bronchial valve implants
- Sleep Apnoea diagnosis and management
- Bi-level ventilation service
- Domiciliary and ambulatory oxygen in the community
- Exhaled nitric oxide testing
- Sputum induction for cell differential counts
- Research and audit
- GP phone advice

Outpatient Services

- SMO clinics
- Nurse practitioner and nurse specialist clinics
- Pulmonary Rehabilitation assessment clinics
- Group education and exercise sessions for patients in the pulmonary rehabilitation programme (community based where possible)
- Physiotherapy clinics for patients with hyperventilation syndrome (HVS) and bronchiectasis
- Clinics with GP's in the community
- Health Care Professional education including Primary and secondary care at all levels
- Pulmonary function testing

The following tertiary services are provided by ADHB for Counties Manukau population:

- Management of patients with pulmonary TB
- Patients with complex interstitial lung disorders
- Lung volume reduction surgery and lung transplantation
- Management of patients with massive haemoptysis
- Management of severe pulmonary hypertension
- Management of patients with cystic fibrosis
- Polysomnography
- Lung Cancer Treatment – Surgery/Radiotherapy/Chemotherapy

The respiratory service uses a multidisciplinary model of care to provide services. There is an emphasis on management of patients in the community wherever possible using the COPD Chronic Care Management (CCM) programme and other community based care to facilitate this. They also work in partnership with GP's, practice nurses and local NGO's (i.e. the asthma foundation and MAGIC) to ensure a seamless continuum of care for patients. Patients are encouraged to actively take ownership of their care and understand the choices they have available to them.

The main service linkages for the CMDHB Respiratory Service are:

- Division of Medicine
- Radiology
- Asthma NZ
- Respiratory Medicine at ADHB
- Physiotherapy
- Intensive Care

Volume information (detailed specific to the service)

	2006/07	2007	2008	2009	2010	2011	2016	2021	2026	Increase 2006-26	% increase 2006-26	% pa increase
NP Consults	1,607	1,658	1,711	1,765	1,819	1,873	2,200	2,500	2,800	1,235	77	2.9
FU Consults	4,149	4,284	4,421	4,564	4,707	4,853	5,600	6,500	7,300	3,182	77	2.9
Respiratory Education and Management,	166 (5379)*	170 (5503)*	175 (5629)*	180 (5759)*	185 5891	189 6026	200 6719	200 7492	300 8353	95 2974	34 55	2.3 2.7
Day patient Bronchoscope volumes	228	234	240	246	252	258	290	327	367	139	60	2.5
Sleep Volumes[1]	865	891	918	945	974	1003	1153	1326	1525	660	76	3.8
Domiciliary Oxygen Volumes	225	225	230	230	235	235	245	255	260	35	15	0.75

Current Workforce

Resource[2]	FTE
SMO	4.11
RMO (Registrar, HO & Fellow)	3.00
Nurse Manager	1.0
Nurse Specialist	4.90
Registered Nurse	0.25
Community Health Worker	3.0
Respiratory Technologist	1.1
Pulmonary Rehab Coordinator	0.30
Clerical Support	2.5

SWOT Analysis – Respiratory Medicine

Strengths

The team:

- Range of staff expertise.
- A highly integrated team that is able to adapt quickly and efficiently.
- In-depth knowledge of our patient population.
- MDT model and approach to patient care.
- Emphasis on a patient centric approach to problem solving approach.
- Dedication and commitment.
- Multicultural team mix.
- Leadership.
- Links with and active involvement in the community.
- The ongoing development of effective local solutions for our local client base.
- Bronchoscopy service & sleep service.

Weaknesses:

- Lung cancer treatment and investigation services.
- Delays for CT, radiological biopsies, PET scanning, delays for surgery, radiotherapy and chemotherapy.
- Patient coordination/navigation through the oncology service.
- Insufficient physiotherapy resource to meet need.
- Insufficient Health Psychology resource to meet the patient need.
- Cover for Lung Function service.
- Limited ability to increase capacity for bronchoscopies when disruption to lists occurs.
- Lack of funding to further develop our sleep service to become primary care based.

[1] Sleep volumes reflect current capacity rather than need

[2] Resource in the Respiratory and Cardiac Investigation Unit budgets excludes ward or allied health budgeted FTE

• The education and professional development programme and commitment to ongoing up-skilling within the department. • Audit activities. • Strong research base and active ongoing involvement in this area. • Commitment to develop community/GP integration. • Ongoing development of educational material for patients.	• Lack of IT support difficulty setting up software systems that are essential to service (e.g. sleep software). • The strength of our cross cultural networks , apart from Maaori, and to a lesser extent Pacific.
Opportunities: • Development an integrated care model of Sleep Apnoea patients. • Further development of group education. • Increased emphasis on community based care and the patient centric based model of care. • Cancer coordination. • Development of sleep model of care to include obesity management, MDT focussed treatment and management approach. • Development of health psychology service. • Improve the diagnosis and treatment of HVS patients. • Development of a second Respiratory Technologist position to cover leave and meet increasing service demands. • Ongoing commitment to research excellence. • Development of bronchoscopy services including Endobronchial Ultrasound (EBUS) and Endobronical Valves (EBV). • Collaboration both regionally and nationally to improve and develop services and educational opportunities • Increased emphasis on health disparities and in particular that of Maaori and Pacific patients. • Ongoing development of links with NGO's including Asthmas NZ. • The development of cross cultural networks both internally and externally. • Workforce development. • Disease prevention.	**Threats:** • Insufficient funding for new drug therapies as they are developed and released on the market. • Potential changes in government and funding models. • Any changes in government policies. • An ageing population with changing patient demographics which will require increased funding to support their care. • Demand for services versus capacity. • Recruitment, growth and staff retention issues.

2.0 Key Issues

Sleep Apnoea services unable to meet community needs

CMDHB has insufficient access to assessment and treatment of Sleep Apnoea services with its resultant effects on health outcomes. CMDHB has high rates of Sleep Apnoea associated with high rates of obesity.

Lack of coordinated services for people with Lung Cancer

Services for people with lung cancer separate respiratory medicine from surgical treatment (Cardiothoracic Surgery) and oncological treatment. Lack of access to PET scanning in the region is an issue for patients with lung cancer.

3.0 Trends and Future Directions

Development of Sleep Apnoea Service

Development of primary care sleep apnoea screening programmes by GPs using simple screening tools. Development of the MDT care model for diagnosis and treatment of severe sleep Apnoea. Increasing access to treatment will decrease health disparities as this particularly affects Maaori and Pacific patients

Promoting care and increasing emphasis on the Primary Sector

Increased emphasis on community based care and the patient centric based model of care by working with PHO's to develop clear communication and improve support in line with their development strategy. This will include continued evolution of community based clinics with GP's and continued evolution of the partnership model with practice nurses. The CMDHB Respiratory Service with work the Maaori health team and the Pacific health units to develop effective networks in the community and extend cross-cultural networks in the community. Development of the nurse practitioner role in primary care will provide the opportunity to support Chronic Care Management in primary care.

Improving coordination of Cancer Services

Improve the coordination of cancer care within CMDHB through the development of coordinated multidisciplinary services and clinics involving oncology, cardiothoracic surgery and respiratory medicine. These clinics will develop with the presence of visiting oncology services and proposed outreach cardiothoracic clinics at Manukau SuperClinic in the future. Improved coordination of care will occur in 2008 with a nurse navigator/coordinator role commencing early 2008. In the future, a PET scanner within the Auckland region will be extremely valuable.

Enhanced health psychology services

Through improving accessibility to the current psychology services, current wait times to be seen will decrease and there will be development of group education initiatives. Input of health psychology can be valuable to the multidisciplinary team in addressing multiple admission patients within the inpatient setting.

Development of specialist nursing and allied health roles within Respiratory Medicine

Specialist nursing, a second Nurse Practitioner and specialist allied health roles in respiratory medicine can work effectively across the hospital and community, and promote subspecialisation within respiratory conditions.

Integrated Care Models

Ongoing development of integrated models of care for patients with respiratory conditions across secondary, primary and community settings.

Early discharge planning for Community Acquired Pneumonia and COPD in the acute care setting

Closer collaboration between secondary, primary and community care (including home IV therapy) to support early and appropriate discharge to the community.

Pulmonary Rehabilitation

Increased provision of pulmonary rehabilitation services and involvement in the development of the new rehabilitation facility at Manukau Campus.

5 Year Plan	10 year Plan	20 year Plan
Expansion of outpatient operational hours to improve access for patients	Primary care based model of care with an increasing number of specialist clinics at GP practices	Imbedded model of care that is predominantly based in primary care with limited secondary care clinics
Sleep service has commenced initial testing in primary care Nurse led service in the PHO's	All initial screening in primary care with only complex cases referred for specialist advice Sleep laboratory at MMH with full polysomnography capability Complex patient with multiple comorbidities only seen in secondary care	Secondary care providing advice to GP's on patient management in complex cases only. Tertiary Non Invasive Ventilation Service in secondary care.
Pulmonary Rehab facilities in use at MSC (currently at MMH)	Rehab programme predominately provided in primary care or the community	Rehab either home, community or primary care based
Continuation of a multicultural workforce working with tertiary institute to develop a ?hospital based training model	Multicultural workforce, trained locally and primarily from our local community	Multicultural workforce, trained locally and primarily from our local community
National Research centre of excellence	International research centre of excellence	International research centre of excellence
Local access to most diagnostic's i.e. 34/128 slice CT and PET scanning	Local access to most diagnostic's i.e. 34/128 slice CT and PET scanning	Local access to most diagnostic's i.e. 34/128 slice CT and PET scanning
Cancer service provided locally (refer to Cancer HSP)	Cancer service provided locally (refer to Cancer HSP)	Cancer service provided locally (refer to Cancer HSP)
Very limited tertiary service provided by ADHB	Patient referral to ADHB for management only in exceptional circumstances	Patient referral to ADHB for management only in exceptional circumstances

4.0 Key Directions

- ✓ *Extension of outpatient operational hours to improve patient access.*
- ✓ *Development of sleep apnoea screening services in primary care with development of full polysomnography services within ten years.*
- ✓ *Development of coordinated multidisciplinary clinics and services for patients with lung cancer.*

- ✓ *Continuing to promote the management of chronic respiratory disease by primary care with rapid response by specialist services on referral.*
- ✓ *Continued development of specialist nursing and allied health roles within Respiratory Medicine.*
- ✓ *Integrated Care Models across secondary, primary and community settings.*
- ✓ *Early discharge planning for Community Acquired Pneumonia and COPD in the acute care setting.*
- ✓ *Increases in pulmonary rehabilitation.*
- ✓ *Increased utilisation of investigative tools.*