Counties Manukau District Health Board

Rehabilitation Continuum Health Services Plan

February 2008

Executive Summary

The HSP Rehabilitation Continuum of Care builds on earlier work completed in the Clinical Services Plan (CSP V2.5) and the Rehabilitation Scooping Study (December 2005) commissioned by CMDHB and ACC. The Rehabilitation HSP takes a ‘whole system’ view of existing rehabilitation service configuration and service gaps. The plan identifies future models of care for rehabilitation services within Counties Manukau including the development of the Manukau Rehabilitation Centre.

In line with the CMDHB District Strategic Plan, the Health Services Rehabilitation Plan will deliver health care that is individual and family centred, and based in the community setting wherever this is appropriate. The plan is designed to improve accessibility, increase efficiency; improve quality of care and decrease potential avoidable hospital admissions.

The Rehabilitation Continuum encompasses CMDHB responsibilities in relation to the Health of Older Peoples Strategy and the Disability Sector. Contained within this Model of Care are core linkages between Home Health Care services and Primary Care teams, operating across personal health and disability services, and that also apply across Medical and Surgical care continuums.

Closer collaboration between Rehabilitation Services and Mental Health Services for Older People (MHSOP) around the management of patients with dementia will be facilitated by the co-location of Mental Health Services for Older People inpatient beds with the Manukau Rehabilitation Centre, with sharing of allied health staff and associated support services across both Rehabilitation and MHSOP.

Care across the continuum will be supported by CMDHB Home Health Care Teams integrating care between both Specialist Rehabilitation Services and Primary Care Teams.

While residential care patients living in the community will continue to be under the care of a General Practitioner and Primary Care Team, the Specialist Rehabilitation Service will provide an increased range of supported services to residential care in the form of specialist consultation (physician, nurse and allied health). This will increase the capacity of primary care and Residential Care to maintain complex patients within community settings and avoid hospital admission.

Care across the continuum will be based on a client participation model (WHO ICF: World Health Organisation International Classification of Functioning, Disability and Health) and will include increased vocational and recreational components of rehabilitation. Vocational and recreational rehabilitation will be provided outside specialist rehabilitation services with close linkages to all other components of care, and supported through closer relationships between the health sector, ACC and Ministry of Social Development.

The increasing acuity of patients necessitates change in the way in which specialist services are provided and the skill sets required by practitioners in specialist services. Rehabilitating staff will need to ensure that in addition to specialist rehabilitation knowledge, they retain skills in working with patients who are less physiologically stable in both hospital and community settings.

The concept of ‘waiting for rehabilitation’ within the specialist setting is currently being replaced by a “pull” philosophy where rehabilitation staff access patients earlier during an acute inpatient episode and ensure that functional maintenance programmes are in place for elderly patients in acute settings. Rehabilitation services will then assist with the early direct hospital discharge of patients to the community from acute wards, or will transfer patients requiring extensive rehabilitation following their acute phase to Rehabilitation Wards. This will allow for increased capacity of the acute and sub-acute wards with the rehabilitation staff being alongside the acute medical care staff providing opportunities to ‘pull’ patients and model ‘maintenance of function’ care for the frail elderly.

Across the Rehabilitation continuum, flexible Models of Care are required to meet the individualised needs of patients, provide different admission, treatment, discharge and follow-up options.

Cultural appropriateness of services is a critical component of appropriate community, residential or specialist rehabilitation services. Rehabilitation services need to be delivered in appropriate cultural and/or environmental contexts to support patient participation and enlist the support of family and community in care.

Health promotion and illness prevention within the Rehabilitation Continuum include national strategies and local strategies aimed at increasing the individual's commitment to self-responsibility for their own health care, and for community development.

As a major provider and funder of rehabilitation services in Counties Manukau, CMDHB has a role to provide leadership to the Rehabilitation sector through working with other health sector health agencies, non-government organisations and intersectoral agencies.

1.0 Introduction

The HSP Rehabilitation Continuum of Care builds on earlier work completed in the Clinical Services Plan (CSP V2.5) and the Rehabilitation Scooping Study (December 2005) commissioned by CMDH and ACC. The Rehabilitation HSP takes a 'whole system' view of existing rehabilitation service configuration and service gaps. This document identifies future models of care for rehabilitation services within Counties Manukau including the development of the Manukau Rehabilitation Centre.

In line with the CMDHB District Strategic Plan, the Health Services Rehabilitation Plan will deliver health care that is individual and family centred, and based in the community setting wherever this is appropriate. The plan is designed to improve accessibility, increase efficiency; improve quality of care and decrease potential avoidable hospital admissions.

Rehabilitation within the context of Health Services Planning at CMDHB incorporates several definitions:

- Rehabilitation means access to medical, nursing and allied health Rehabilitation services to regain and/or achieve wellbeing and participation in their community.
- Rehabilitation means access to related support services and resources required by clients to achieve optimum levels of support and wellbeing.
- Rehabilitation means supporting wellbeing by considering the importance of social, cultural and psychological support requirements.

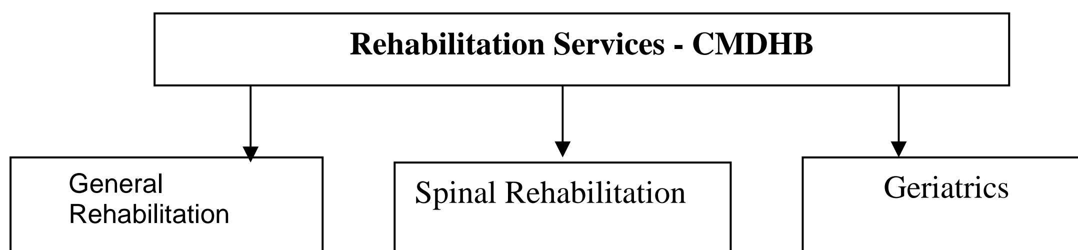
Rehabilitation Scoping Study 2005

The framework for the Rehabilitation Continuum uses the CMDHB Generic Model of Care to ensure that all components across the Care Continuum are included. As CMDHB is the provider of Spinal Rehabilitation Services for patients from most North Island DHB's, there is differentiation in planning between the regional Spinal Rehabilitation services and General Rehabilitation services which are provided only for the local population.

The vision of the Rehabilitation HSP is to provide improved coordination and integration to deliver better client outcomes for the community of CMDHB district and users of existing regional services such as the spinal service. A full range of rehabilitation services will be offered by a range of providers with the potential to further develop flexible services that better meet local, regional and national specialist rehabilitation requirements. This approach will include medical, psychosocial and vocational rehabilitation. It will include support for adult and some adolescent clients to close the gaps that exist in the current rehabilitation continuum and provide both short and long term life-long rehabilitation and related support services for clients.

The Specialist Rehabilitation Services at CMDHB include both Rehabilitation Medicine and Physicians for the Elderly (Geriatricians). The former include specialists physicians involved

in provision of Rehabilitation Medicine across all age groups, with a focus on Rehabilitation. Physicians for the Elderly provide rehabilitation services for elderly patients in addition to providing Medicine for the Elderly – particularly frail elderly and patients with multiple medical pathologies. In CMDHB, while there are very close linkages between rehabilitation services and Mental Health Services for Older people, the MHSOP Continuum of Care is contained within the Mental Health work stream.



Child Rehabilitation services have been excluded from the Rehabilitation Continuum and from consideration within this phase of the Health Services Plan. Rehabilitation for Children will be included along with other child health services in a later phase of the plan.

1.1 Background to Rehabilitation Service Planning

The CMDHB Clinical Services Plan V 2.5 (2005) provided a broad strategic framework for the delivery of provider arm services up to 2020. Included in this is reference to a future service delivery model and location for rehabilitation.

Development of a rehabilitation centre at the Manukau site was proposed to free up capacity on the Middlemore campus, maximise management of projected bed requirements based on population growth, and to provide a focus for community-based Rehabilitation and Spinal Rehabilitation Services. Location of this centre on the Manukau SuperClinic site includes relocation of the existing regional Spinal Unit service (currently located in Otara).

A scoping study commissioned by ACC and CMDHB[1] identified that the range of rehabilitation programmes currently offered does not encompass a comprehensive approach from a 'whole-of-person' perspective, i.e. a focused approach to vocational, recreational, community rehabilitation and support is limited within the current environment. Several existing rehabilitation specialities at CMDHB (spinal cord injury, rheumatology) operate as examples of more developed and holistic service delivery. Other services need expansion across the full range of rehabilitation components. There is also an opportunity to facilitate integration across multiple providers and pull together to provide leadership by CMDHB in order to develop a framework of services provided by the full range of health and intersectoral providers. While CMDHB has a role to provide leadership in health services, many components of the care delivery system are more appropriately delivered by other health and disability providers.

Rehabilitation services in the future need to be designed in such a way as to allow people to live more independently and to exercise greater personal choice. In order to achieve this, people will look for greater flexibility in service provision, improved accessibility, more timely interventions, a broader range of service providers from whom they can choose their care, and care closer to home with minimal disruption to their daily lives. This all requires a significant 'shift' in the way care is delivered to a more - away from what is often a 'one size fits all' approach often delivered in a specialist setting to a community-based, responsive, adaptable, flexible service. This is far more than simply changing the location from where care is delivered. It is also about changing mindsets and behaviour across the whole system.[2]

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[1] CMDHB Rehabilitation Centre Scoping Study December 2005
[2] NHS Making the Shift Review July 2006

The provider arm of CMDHB provides general and spinal assessment, treatment and rehabilitation services across inpatient, outpatient and community settings. There is a strong focus in ensuring continuity of care from the hospitals to the community settings.

The specific rehabilitation services provided include:

- Neurorehabilation – in-patient service for clients aged between 16-65 who have sustained a head injury, stroke or any other neurological condition.
- Spinal rehabilitation – a regional service providing comprehensive inpatient, outpatient and outreach care for people with spinal cord injury.
- Home Health Care (HHC) – an interdisciplinary, community based service supporting clients to remain in their own home (through either disability or personal health funding streams).
- Health Services for Older People (HSOP) For those aged 65yrs and over with multiple medical conditions, functional impairment and disability requiring specialised multidisciplinary services.
- Respite Care – inpatient care for patients who live at home but require residential hospital-level or rest home care for short periods.
- Long stay inpatient services for elderly/geriatrics in several locations.
- Needs Assessment and Service Coordination (NASC) for assessment and coordination of disability services for the 65+ age group.
- Palliative care - inpatient terminally ill care.

[CSP V 2.5 Jan 2006 p.49]

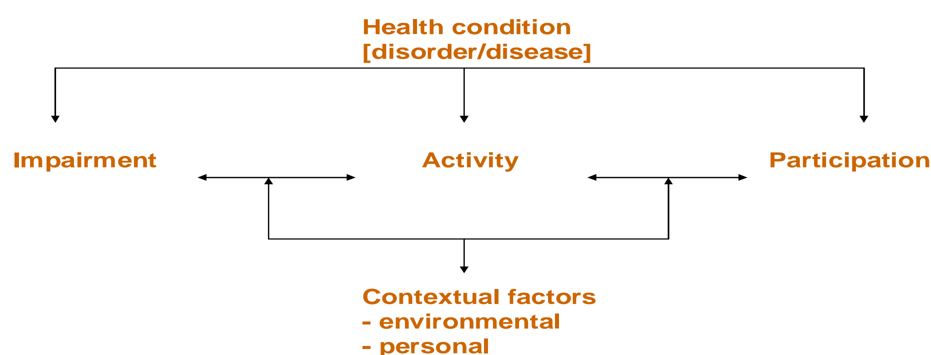
WHO ICF Model

The World Health Organisation (WHO), the International Classification of Functioning, Disability and Health (ICF) framework will inform the design of how Rehabilitation services will be delivered. One of the key features of the ICF framework is that it identifies interactions among health conditions, body functions and structures, activities and participation, and acknowledges the influence of environmental and personal factors on health and health conditions.

The ICF classification provides a comprehensive and detailed description of a person's experience of disability, including the environmental barriers and facilitators that have an impact on a person's functioning. In doing so the conceptual framework emphasises that functioning and disability are not liner but rather that all components are related to and consequently influence one another. In this regard disability is no longer understood as a feature of the individual, but rather as the outcome of the person with a health condition and the environmental factors.[3] [4]

[3] Schneider et al Disabil Rehabil 2003; 25:588-95: Scoping Study p.7: Bickenbach, Chatterji, Baley & Unstun, 1999; Byrne and Orange , 2005

[4] Reference: Halbertsma, j., Heerkens, Y., Hirs, W., de Kleijn-deVrankrijker, M., Van Ravensberg, C., & Napel, H.,(2000). Clinical Commentary. Towards a new ICIDH. Disability and Rehabiltiation, 22 (3), 144-56.



2.0 Key Issues

- Increasing provision of ambulatory and community based rehabilitation services increasingly acute hospitals will only be used for the most specialist forms of rehabilitation care and for brief intensive courses of rehabilitation therapy.
- Large increases in the numbers of elderly driving a need for more support care in community based settings to avoid increases in hospital beds.
- General acceptance that an efficient and effective rehabilitation system will result in improved health outcomes with resultant benefits for individuals and society.
- Development of more comprehensive community and in-home rehabilitation services with better transition processes from hospital to home, and back to hospital if appropriate.
- The development of integrated stroke services including stroke prevention, acute care, rehabilitation and long term support for patients and their whanau/family. In New Zealand this is driven by NZ Stroke Guidelines[5] with the support of the Ministry of Health.
- Population health initiatives for health promotion of elderly/disability community e.g. nutrition programmes, falls prevention, elder abuse prevention.
- Inclusive, culturally appropriate care to target groups that have with poorer health status and promote lifestyle changes appropriate to cultures and individual health needs.
- Increasing needs for complex discharge planning, robust rehabilitation and community-based care to reduce hospital length of stay, avoid hospital re-admission, and manage an increased incidence of chronic illness and disability in community settings.
- Increased need for a multi-disciplinary team approach to address patient complexity, chronicity and increasing comorbidities.
- Workforce development acknowledging integrated multi-disciplinary programmes for chronic disease management will incorporate expanded nursing and allied health specialist roles, and more cross-skilling across current professional boundaries.
- Improved integration of providers across settings and components of care across the full care continuum.
- Ongoing development of evidence-based practice, clinical guidelines, audit and quality assurance programmes. Increased accountability for healthcare costs leading to quantifying benefits through outcome based rehabilitation programmes.

[5] Life After Stroke – NZ Stroke Guidelines 2003

2.1 International Trends in Spinal Rehabilitation

- Outcomes-based rehabilitation programmes.
- Increased recognition of the importance of transitional living arrangements in reducing complications following discharge from inpatient spinal rehabilitation.
- Integrated models of care that integrate services for people with Spinal Cord Injury across all components of care and settings. This includes health promotion, early intervention, and rehabilitation in community and hospital settings, acute and routine surgical intervention, and home care support services and beyond.
- Noticeable trend of an increasing proportion of patients with Spinal Cord injury due to medical pathology – rather than trauma.
- Increases in the range of surgical interventions available to support Spinal Cord Rehabilitation patients to live with a disability. e.g. Surgical and medical interventions such as advances in pain management (baclofen pumps) and some of the urology procedures which may improve quality of life
- Increased evidence-base behind practice. Spinal Services is a close, discrete international community where there is strong sharing of new developments in Spinal Services and large amounts of international research undertaken.
- Transitional living is important component of Spinal Rehabilitation – model could be shared across Rehabilitation services and patients with other aetiologies that meet the criteria may need to access this service.
- Shorter length of stay in acute surgical beds with earlier consultation and transfer to inpatient rehabilitation services.
- Shorter lengths of inpatient rehabilitation care with earlier transfer to transitional and community care.
- Tele-medicine services from specialist spinal rehabilitation units to support general rehabilitation specialist services to cope with ongoing needs of spinal patients in the community between specialist spinal service reviews.
- Inclusive models of care involving patient/whanau links to community groups that support and advocate on behalf of spinal cord injury patients.
- Increasing numbers of spinal patients progressing into older age groups and developing age-related conditions with associated increase in disability.

3.0 Trends and Future Directions

Increases in service demand

The Counties Manukau population is growing around 2% each year. While CMDHB has one of the youngest populations in New Zealand, it has the largest number of relatively deprived adults and children, and is one of the fastest growing populations. Particularly in the over 65 year age group which is expected to double by 2021. The over 85 year old group is expected to increase four-fold by 2021. These groups are high users of health and disability services.

The increasing numbers of older people aged 85 years and over, Asian, Maaori and Pacific peoples, the high proportion of women in older age and likely increase in demand on health services will all impact on rehabilitation services planning[6].

As Rehabilitation service patients are predominantly in older age groups, significant change in Model of Care are required if we are to avoid large scale and unaffordable increases in inpatient facilities for which the necessary workforce is unlikely to be available.

Implementation of the Ageing In Place strategy[7] will see the need to develop larger, more targeted, efficient and effective community-based services.

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[6] Counties Manukau District Health Board. Population Health Indicators. 3rd Edition, July 2005

[7] ??AGEING IN PLACE REFERENCE

Socioeconomic composition and ethnic diversity

CMDHB has a particularly diverse population with rates of Pacific, Maaori and Asian significantly higher than the national average. In time the proportion of people in each of these ethnic groups will progress increasingly into old age with significant demands on resources.

Table1 : Forecast population growth projections

	2001	2006	2011	2016	2021	2026	% increase 2001-2026
Māori	69,230	76,010	82,640	89,700	97,320	105,570	52%
Pacific	78,550	90,410	102,100	114,470	127,790	142,290	81%
Asian	47,700	73,700	88,300	100,600	113,000	125,000	162%
Other	198,230	203,050	211,040	213,930	215,670	216,140	9%
Total	**393,710**	**443,170**	**484,040**	**518,700**	**553,780**	**589,000**	**50%**

[Source: MOH-specified ethnic-specific projections, June 2004]

For traumatic brain or spinal cord injury, population composition is particularly significant. Demographic data provided by ACC[8] regarding serious injuries indicates that of all claimants in this group, 32% suffered severe to moderate brain injury and three quarter of these individuals were male and half of all ACC claims were related to motor vehicles accidents. This has clear implications for the rehabilitation services in terms of the spinal and other neurorehabilitation. The cultural mix of claimants for the Auckland region reflects 63% European, 12% NZ Maaori, 12% Pacific people and 11% Asian. This highlights the needs for rehabilitation services to effectively manage the cultural diversity of rehabilitation clients. This is of particular importance in the potentially high needs client group, as 23% of the serious injury claimants are New Zealand Maaori.

Data on claimants with life-long needs or long term high costs, 67% are male, 25% are Maaori and 82% had their accident between the age of 10-29 years of age[9].

CMDHB will very likely have significantly higher needs for rehabilitation and long term supported care due to the ageing of Maaori, Pacific and Asian populations, and due to the higher incidence of traumatic injury (spinal and head injury) in young Maaori with progression of sequelae into middle and older age.

In addition, CMDHB has higher levels of social deprivation which reduce the levels of self-funding available. Non-ACC funded patients will therefore have increased reliance on DHB support to meet all their personal health and disability needs.

In 2004, just under nine hundred people are admitted to Middlemore Hospital with a Stroke (650) or TIA (230) diagnosis. These admissions accounted for approximately 5000 acute bed days per annum, and approximately 4000 rehabilitation bed days. Of the people with stroke, only 50% spent time in the Acute Stroke Unit, and 22% received extended rehabilitation in the AT&R unit. Of the entire Stroke / TIA group, over 70% return home, 14% go to residential care, 5% transfer to other DHBs, and 9% die. [10]

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[8] ACC. Claims Management Committee Paper, 11 July 2005
[9] CMDHB Rehabilation Centre Scoping Study. December 2005

[10] Counties Manukau Stroke Guidelines Project 2005

4.0 Key Directions

The Rehabilitation continuum of care covering general rehabilitation, spinal rehabilitation and geriatrics illustrates the interdependencies between all the components of the care continuum, and the close synergies that rehabilitation has with other health services and intersectorally.

Key features of this continuum are:

- Rehabilitation services delivered across two broad domains. Community Settings including Primary and Community based Health Centres, DHB community-based sites, NGO health sites, home-based care and other settings based on individual and community needs such as workplaces, schools, churches, Marae and residential care facilities. Specialised Care settings include Middlemore Hospital, Manukau SuperClinic and the proposed new Rehabilitation Centre on the Manukau campus.
- Specialist Rehabilitation Services can be a component of an acute or chronic condition initially managed by another service with the patient subsequently transferred to care under the specialist rehabilitation service.
- Specialist Rehabilitation Services provide a consultation service to other specialist services in the area of rehabilitation expertise. Increasingly specialist services will be providing early and active intervention for patients in medical and surgical services to ensure the maintenance of function in an acute setting with early hospital discharge or transfer to a specialist rehabilitation setting.
- Specialist Rehabilitation Services operate across hospital, outpatient, community and residential settings with a major role in integrating services between multiple providers.

Model of Care : Rehabilitation						
		General Population	**Population at Risk of Condition**	**Population with an early condition and minimal co-occurrences**	**Population with advanced condition and multiple co-occurrences**	**Populations with an end stage condition**
	Health Promotion	General Lifestyle	General Lifestyle	General Lifestyle	General Lifestyle	General Lifestyle
	Prevention	ACC initiatives e.g. Road Safety Rugby Union Smoking cessation Green Prescription Five+ day nutrition strategy Healthy Eating Strategy Food Charter GP Wellness Checks Healthy city/healthy schools CMDHB Pacific Healthy Eating Strategy	Incorporation of risk management within Lets Beat Diabetes initiative. Education on risk factors. May include referral to Community Dietician, community health worker etc	General population' health promotion initiatives as routine part of primary or secondary care activity Lets Beat Diabetes initiative	General population' health promotion initiatives as routine part of primary or secondary care activity Lets Beat Diabetes initiative	
	Early Detection	Better management of depression reducing suicide attempts that can lead to hypoxic brain injury Blood pressure and carotid bruits review as part of routine GP health visits (stroke risk). Occupational Health Nurse review of Blood pressure as part of		Early assessment and diagnosis by GP's and referral to specialists if not requiring acute admission Rapid access to investigations (EEG,EMG, CT,MRI, carotid ultrasound)and neurology consults Early intersectoral communication and sharing of information	Assessment and diagnosis by GP/A&M of signs and symptoms of TIA or Minor CVA	

		employee assessment				
	Supported Self-Care			Home based carers need to have rehabilitation philosophy NASC assessment determines eligibility for support provided by Home Help providers, Personal Cares.	Community based care Home based carers need to have rehabilitation philosophy Multidisciplinary Team reviews Access of equipment through provider such as Enable. *Gap: child care provision is increasing need for those unable to attend rehabilitation or needing to support with caring for children* *Gap: Development of focused rest home and residential care facilities catering for young disabled*	Community based care Community Support groups and their relevant websites
	Disease/Injury Specific Care Management (Varying Levels)	Management of risk factors and intervention based on clinical guidelines				
	Specialised Care			Early referral to Spinal Rehabilitation Multidisciplinary Team Outreach MDT programmes	Early referral to Spinal Rehabilitation Multidisciplinary Team for issues relating to adjustment, maintenance of function.	Referral to Rehabilitation Specialists for changes in condition Referral to Rehabilitation

				GAP:Neuropsychology and clinical psychology input into MDT plan needing further development and resource Access to MDT Rehabilitation Unit services for assessment and treatment Vocational and return to work rehabilitation Recreational, ADL and driving rehabilitation for some clients MDT post-discharge follow up consults as appropriate. Clinical Management by specialist physician according to Stroke guidelines Referral from primary care to specialist physician for urgent outpatient consult Access to carotid ultrasound for investigation of Carotid bruits	Access to other medical/surgical services for management of related and non-related medical conditions Outreach MDT programmes Neuropsychology and clinical psychology input into MDT plan Vocational and return to work rehabilitation Recreational, ADL and driving rehabilitation for some clients	Specialists/Gerontologist for changes in condition and for progress in slow stream rehabilitation

	Day Stay Admission			MDT rehabilitation programmes to maintain function where appropriate Vocational and return to work rehabilitation Recreational, ADL and driving rehabilitation	MDT rehabilitation programmes to maintain function where appropriate Vocational and return to work rehabilitation Recreational, ADL and driving rehabilitation	Symptom management Reassessment of slow stream rehabilitation patients for further rehabilitation Recreational, ADL and driving rehabilitation
	Episodic Inpatient Admission		Inpatient admission for Carotid endarterectomy by vascular surgeon following referral from ?physician ? GP	Inpatient admission to rehabilitation centre for MDT programmes from GP or MDT team. Inpatient admission for other medical services – links with the rehab service and GP Vocational, return to work, recreational, ADL and driving rehabilitation as appropriate	Inpatient admission to rehabilitation centre for MDT programmes Vocational, return to work, recreational, ADL and driving rehabilitation as appropriate	Acute Medical admission for acute changes in condition where that care cannot be provided in an ambulatory setting
	Palliative Care				Home, residential, hospice or hospital-based care	Home, (young) residential, hospice or hospital-based care *Gap: improved access to hospice for clients with non-cancerous conditions.*

4.1 Health Promotion and illness prevention

There is a wide range of programmes available within Counties Manukau that promote health and prevent illness within the Rehabilitation Continuum. These include:

- Smoking cessation programmes to reduce the rates of smoking in the community
- Healthy Eating Healthy Action to reduce obesity in the community and it's impact on rehabilitation.
- Healthy Housing Initiatives to support wellbeing in the community and reduce incidence of respiratory illnesses.
- Promotion of "Barrier Free" status to support lifestyle of disabled (This type of service is provided by contractors such as Gaylene Gafney – who has a spinal disability).
- Positive Ageing and Ageing in place initiatives (these are outlined in detail in the CMDHB HOP Action Plan.
- ACC initiatives such as:
    - Road Safety campaigns to reduce speed and encourage child restraints and wearing seat belts.
    - Rugby Union – such as scrum rule changes (hold, touch, pause, engage) and promotion of more touch rugby in primary schools.
    - Management of falls risks through environmental changes and 'manual handling' training for health professionals.

Key Directions

✓ *Ongoing health promotion and illness prevention programmes to improve health and wellbeing of the population.*

✓ *Ongoing development of culturally appropriate programmes in culturally appropriate settings for Maaori, Pacific and Asian peoples with particular cognisance of physical barriers to communication and language associated with ageing or head injury, and English as Second Language patients.*

✓ *Participation of Counties Manukau experts in the development of national and local programmes that ensure local applicability of programmes across the Continuum of Care.*

4.2 Early Detection

Primary Care teams and other specialist service providers (e.g. surgery, internal medicine) identify at-risk elderly patients while managing acute or chronic conditions within their specialty. Referrals are then made to Rehabilitation, Medicine for the Elderly, Geriatric Services or Home Health Care to prevent or delay patient deterioration and requirement for further residential care or intensive specialist Rehabilitation Services.

The CMDHB Continuum of Care strategy promotes improved early detection and intervention strategies for patients aimed at reducing demand for residential care and specialist hospital services.

Referral systems must be strong and responsive to provide easy access to referrers for those patients who may require care across the Rehabilitation Continuum.

Osteoporosis is a major risk factor for the elderly and a major cause of morbidity and mortality following a patient fall. Enhancing access to bone densitometry in primary care, and the associated management of osteoporosis and fall prevention programmes will reduce the number of Counties Manukau patients requiring residential care or rehabilitation services following limb fracture.

Management of blood pressure to avoid stroke, cardiac disease and patient falls is important with the elderly. Frequently this involves a team of primary care providers, Home Health Care and specialist staff.

Key Directions

- ✓ *Increased awareness amongst primary care and specialist services of responsibilities around early detection and referral to appropriate rehabilitation services and health promotion programmes.*

- ✓ *Specialist Rehabilitation services acting as a conduit for primary care or secondary specialists (e.g. Surgery, Internal Medicine) to access specialist assessment, treatment planning and rehabilitation.*

- ✓ *Enhanced osteoporosis management to reduce requirements for acute orthopaedic care, inpatient Rehabilitation service and residential care that follow a patient fall with fracture.*

- ✓ *Early Management of medical conditions in the elderly.*

4.3 Supported Self Care

Supported self care is a critical component of the Rehabilitation Care Continuum due to an ageing population, increasing levels of chronic illness and disability, and the close association between rehabilitation services and disability. A key driver for Supported Self Care is to empower individuals/whanau to take responsibility for their own health.

General Practices are the key health team supporting people living at home or in residential care. Working as a team, they coordinate care between community-based healthy and disability providers, interface with specialist services, and refer patients as appropriate to specialist services. On the discharge of a patient from specialist hospital care, the medical duty of care is transferred from a specialist physician to the GP.

NGO's provide a wide range of valuable support and advocacy services to patients and their families. These organisations are funded from a variety of sources and provide valuable linkages across the Rehabilitation Continuum.

Private providers and NGOs provide the largest share of paid caregivers in the community and this is expected to grow in line with increasing demands for services based in people's homes.

The CMDHB Home Health Care (HHC) service is composed of District Nursing and Allied Health staff and provided through five geographically based teams. Services straddle Primary Care and Secondary care, meet both personal health and disability needs, and provide care for patients with both acute and chronic conditions. Specialist staff work within a team philosophy delivering care in homes, and increasingly will provide additional support and advice to assist residential care providers to access early rehabilitation services and avoid hospital admission. Direct referrals to HCC are made by general practices and specialist health service teams, or occur as part of a discharge process following a hospital admission. Once the PCHC have been developed these teams may be co-located into local PCHC.

Currently the Community Based Rehabilitation Team consisting of Medical, Nursing and Allied Health staff provides intensive services to patients with neurological conditions that are likely to respond to an intensive course of rehabilitation therapy. Expansion of these specialist services to include the full range of conditions and attached to each geographically based HHC teams will reduce long term care needs.

Large numbers of patients within the Rehabilitation Continuum of care require Residential Care. With growing pressure on residential care, and a Model of Care that promotes Ageing in Place, the support level required by patients living in residential care will increase over time. Staff in residential care will increasingly require greater ability to cope with patients who are less physiologically stable and will be under increasing pressure to ensure maintenance of patients function.

Needs Assessment and Services Coordination (NASC) provided by CMDHB both assess and coordinate care for people over 65 years of age with long term disability (including psycho geriatrics) and palliative care. Most caregiver support services are contracted to private provider organisations. NASC manages access to funded residential care services where home based care is impracticable.

For clients under 65 years of age, the Needs Assessment and Service Coordination function is provided by Taikura Needs Assessment Service.

Family/whanau play an important role in supporting the patient in the community… There are some pilot projects looking at how to provide resources and support to family members who take on the responsibility for caring for a family member at home – that might otherwise be in residential care. This is an area that will require further investigation and intersector collaboration.

Key Directions

- ✓ *Increased provision of supported services in the community with an expanding range of community-based providers.*

- ✓ *Home Health Care services provided by District Nurses will develop closer links Primary and Community Health Services, increasingly act as a linkage between Primary Care Teams, caregivers and Specialist Rehabilitation Services, and will assist primary care and residential care to maintain appropriate complex patients in community settings.*

- ✓ *Community and non-government organisations will continue to play a major role in supporting people to remain in the community –in the direct provision of care, and in integrating care services.*

- ✓ *Expanding "Ageing in place" strategies will continue to play an important role in supporting elderly and disabled people to live in the community. e.g. Alarm systems for elderly living alone at home; Meals on Wheels; Respite Care access via NASC funding*

- ✓ *Increasing community responsibilities and strategies for keeping the elderly or disabled participating in society. Increasing community development with recognition of existing structures and organisations that will play a vital role e.g. Pacific churches, marae.*

- ✓ *Expansion of Community Based Rehabilitation Teams (Medical, Nursing, Allied Health therapies) attached to each HHC team will be extended to rehabilitation patients conditions based on the patients capacity to benefit.*

- ✓ *Needs Assessment and Service Coordination services will become less age dependent and seamless between different funding streams.*

- ✓ *Residential Care staff will receive ongoing upskilling to safely manage clients with higher support levels and who are less physiologically stable.*

4.4 Disease/Injury Level Care

GPs provide the medical care for patients living in the community whether it is at a private home or in residential care. As groups, Elderly or disabled patients have significantly higher needs than the general population and GP's are more likely to access a range of Primary Care initiatives including Primary Options for Acute Care (POAC), Frequent Acute Medical Admissions (FAMA), Careplus and the Chronic Care Management Programme. Primary Care will also 'case manage' patients in the community using DHB targeted funding with practice nursing input and collaboration with HHC and other community agencies.

Close linkages between Primary Care Team and the Home Health Care team are valuable to ensure rapid changes in patient condition can be addressed by additional support services

being put into the care package. Similarly, rapid response is required from access to medical specialists to assess and advise on care management.

Management of Bariatric conditions is important for many patients in the rehabilitation continuum as obesity can seriously impede a clients ability to undertake Activities of Daily Living (ADLs), adversely affecting health status and increasing care requirements. This responsibility sits across the continuum of care with different points for accessing services

Key Directions

- ✓ *Key disability and personal health medical care for patients in the community is met by GPs and their Primary Care Team.*
- ✓ *Responsive and supportive links between Primary Care Teams, HHC and Specialist Medical consultation.*
- ✓ *Shared responsibility for addressing Bariatric issues affecting client functioning.*

4.5 Specialist Rehabilitation Services

There are two routes to Specialist Rehabilitation Services:

Community Referrals: These are direct referrals made to specialist health services either through GPs referring directly to the service or through self-presentation of a frail elderly patient to Emergency Care where the patient is accepted by the Rehabilitation service following EC assessment.

Specialist Service transfers to Specialist Rehabilitation Service: Referrals to Specialist Rehabilitation Services for patients being managed by other Specialist Services (e.g. Surgery, Internal Medicine). While frequently this will be following an inpatient episode, increasingly it will arise from an outpatient consultation by another specialist service or prior to a procedural intervention or advanced care planning where patient assessment is required.

When care is transferred to Specialist Rehabilitation Services, both routes give responsibility for rehabilitation services to link post-discharge care and follow-up in the community, and to discharge medical responsibilities to GPs on inpatient discharge.

General rehabilitation services provided at CMDHB include an integrated Stroke Service; amputee, TBI and other neurological; orthopaedics, musculoskeletal and chronic pain; as well as cardiac, respiratory and other related medical Rehabilitation services. CMDHB expects to continue to provide these services into the future with development across the Continuum of Care in all of these areas.

Allied Health Teams (Physiotherapy; Occupational Therapy; Social Work; Dietician; Psychology and Speech Language Therapy) will be split into the two broad domains of Community and Hospital Specialist settings. Inpatients will be seen by the facility-based allied health teams at Middlemore Hospital or Manukau Rehabilitation Centre with all outpatients (referrals and post-discharge) seen at the Manukau Rehabilitation Centre.

Vocational and Recreational Rehabilitation funded by ACC and MSD aimed at keeping people in work; supporting return to work and participation within their community. Evidence growing to suggest that early intervention with vocational rehabilitation is required in the inpatient rehab phase. Agencies such as Kaleidoscope offer support while patients still in the Spinal Unit and support return to work rehabilitation which is funded by ACC.

Referral to recreational and driving rehabilitation, for clients where this is identified as a component of their care plan.

Recreational Rehabilitation is an integral component of inpatient rehabilitation for Spinal Injured patients and access should be available during the inpatient Rehab phase. The

Spinal Community has suggested that this may be offered by private or charitable trust but "hosted" on site.

4.5.1 Specialist Community Based General Rehabilitation

Wherever practicable specialist services will be delivered in community based settings, particularly when this involves assessing an individuals ability to cope within their own environment, or putting in place treatment or rehabilitation programmes specific to the individuals living environment.

A range of community based settings are used to provide specialist care:

- Domiciliary visits by medical, specialist nursing or allied health practitioner
- Residential care facilities
- Primary and Community Health Centres or large GP practices
- Manukau Rehabilitation Centre outpatients or day patient programmes

Specialist services are broad and flexible to meet increasing patient requirements to live as independently as possible:

- Older people with illness and disability may be seen at home, in rest homes or private hospitals for:
- Medical opinion and advice on management, further investigations or rehabilitation
- Advice on existing level of care and support.
- Advice on need for institutional care and level of care required.
- Allied health and nursing assessment, treatment and functional maintenance programmes provided by the HHC or CBRT
- Outpatient Allied Health (assessment, planning and treatment) programmes provided post-discharge, or as part of a community referral. Where therapy is required this will be undertaken at the Manukau Rehabilitation Centre and increasingly in PCHC where clinically appropriate.
- Specialist and Primary Care Teams working together early in patient care programme to manage Bariatric issues that affect independence and ability to function.
- Outreach programmes are provided in a Multi-Disciplinary Team framework involving medical, allied health, nursing input. Access to specialist neuro-psychology and clinical psychology input is required for complex patients.
- For select clients with considerable Specialist Rehabilitation input, an identified key worker within the HHC coordinating care across the specialist team and liaising with primary care, NASC and other agencies (e.g. housing and WINZ)
- The Needs Assessment Service Co-ordination (NASC) team will complete a Needs Assessment to establish that residential care is the most appropriate option and will then assist with the co-ordination of the residential care placement. Where remaining in the community is the most appropriate option the NASC team will complete a Needs Assessment and discuss the home based support services and community supports available.
- Specialist services promote early assessment and referral by GP to neurology services for confirmation of neurological conditions prior to referral to Rehabilitation Services for confirmation of diagnosis and to inform rehabilitation programme

Key Directions

- ✓ *Recognition that the Primary Care Team holds key responsibility for the patient in the community and must have clear verbal and/or written communication regarding care being provided by specialist teams.*

- ✓ *Provision of specialist care should be in the community wherever practicable. A team-based approach to community based referral for hospital admission whereby patients are assessed by 2 members of MDT to determine that admission is unavoidable.*

- ✓ *Strengthening links between specialist services and primary care will be achieved through the geographically based HHC, and with specialist and home health care staff presence in PCHC as they are developed.*

- ✓ *Community Based Rehabilitation Team of Medical, Nursing, Allied Health staff providing an intensive rehabilitation programme for select clients will be extended and be based on need and capacity to benefit rather than determined by condition or age group.*

- ✓ *Expansion of geographically based Home Health Care Teams to include a Community Based Rehabilitation Team within each HHC Team.*

- ✓ *Strengthening links with residential care for functional maintenance programmes for some patients for whom any recovery will be slow following hospital discharge, but who no longer require secondary care facilities.*

4.5.2 Hospital-based Specialist Care

Specialist inpatient care will be provided from two sites - Middlemore Hospital and the proposed Manukau Rehabilitation Centre. Inpatient facilities at each of these sites has a different focus with flexible utilisation of beds by a cohort of patients who are suitable for inpatient care at either facility.

Patients managed at Middlemore Hospital will generally be patients who are admitted acutely to hospital for management by other services and for whom following acute treatment by another specialty, require a short period in an ATR ward. Many of these patients will be less physiologically stable and will have medical and clinical support needs requiring care at a full secondary care hospital. Service collocation will allow closer collaboration between the related acute service and specialist rehabilitation e.g. orthopaedics/ATR, and the Stroke Unit.

The ATR wards at MMH relocating into the main hospital buildings will provide opportunities to develop stronger links between ATR and medical/surgical services, achieve earlier “pulling” of patients to rehabilitation, and will facilitate better care for patients with a degree of medical instability.

Patients most appropriately managed at the Manukau Rehabilitation Unit include physiologically stable community- referred patients requiring ATR, and post-acute patients from a secondary care hospital who require a longer period of rehabilitation. With the Spinal Unit and general rehabilitation wards being co-located at Manukau, there will be flexibility for bed usage when service volumes fluctuate and services reconfigure over time.

While the Rehabilitation Centre will act as the hub for CMDHB Rehabilitation Services, services will be increasingly community focused. Core to this model is development of a rehabilitation centre on the Manukau campus to form the hub of CMDHB provider arm rehabilitation services, with strong linkages to other rehabilitation services based in the community and the Middlemore campus. A guiding principle for designation of resources will relate to the assessed ‘support level’ requirements, as a means of identifying the best environment, services and service providers to meet client participation needs and to enable attainment of their goals, in surroundings that include an understanding of Maaori values and customs tikanga Maaori. This will be achieved by facilitating a multi-provider environment so that CMDHB does not duplicate services already in place and functioning well (e.g. Lifetime Rehabilitation Planners[11]).

Table 2 : Proposed Rehabilitation Facilities:

Middlemore Hospital	2x Rehabilitation/ATR wards for direct admissions of medically unstable frail elderly, or acute/semi-acute transfers of patients from medical/surgical services. One of

[11] CMDHB Rehabilitation Scoping Study December 2005 p.8

	these wards will be located adjacent to an Orthopaedic ward, and the other located adjacent to the Acute Stroke Unit. On occasions these units will be required to manage MHSOP patients who are physiologically unstable, and hence unsuitable for transfer to the new Manukau campus.
Manukau Site	2x Rehabilitation/ATR Wards for the care of physiologically stable patients on discharge from acute medical or surgical wards, or community admissions following referral by General Practitioners. The new Spinal Unit for the Rehabilitation of Spinal patients (acute injury, medical, or following elective surgical procedures) Rehabilitation Outpatient clinics and 'Daystay' patients

Inpatient services will be configured to allow several routes via specialist teams for patients to access services. Direct admission to inpatient Rehabilitation wards is and will continue to be available via Emergency Care following specialist rehabilitation assessment, or directly to via community based assessment by specialist teams in collaboration with Primary Care Teams. This will streamline processes for community based referrers and ensure robust assessment and exploration of all community based options for avoiding patient inpatient admission. Acceptance of admissions will be coordinated by the Rehabilitation admitting team.

Increasingly geriatricians will work in closer collaboration with acute medical and surgical services, with geriatricians shared between Rehabilitation and the Medical or Surgical specialist team. This model already exists for Orthogeriatrics at CMDHB. This approach will facilitate earlier involvement of rehabilitation in the care of patients in the acute episode and with preoperative assessment of elective patients leading to better discharge home from acute medical/surgical beds, or earlier transfer of patients to rehabilitation inpatient beds.

As part of the "inreach" programme, Rehabilitation Nurse Specialists will work with acute Medical and surgical inpatient teams and inpatient allied health teams to ensure elderly and/or frail acute patients have Functional Maintenance included in care plans delivered by the acute medical and surgical nursing teams. This is critical to ensuring that during an acute illness avoidable muscle loss or loss of function which results in permanent disability or long term rehabilitation is avoided.

For many acute medical/surgical patients, early and appropriate maintenance of function will enable direct discharge of rehabilitation patients from acute care to the community with HHC or CBRT input where indicated.

Where an acute medical or surgical episode of care indicates likelihood that a period of intensive inpatient rehabilitation is required, these patients are "pulled" as early as possible to either the ATR inpatient wards at Middlemore Hospital (if physiologically unstable) or to the Manukau Rehabilitation Centre.

Slow stream rehabilitation patients will increasingly be managed in residential care with care plans supported by the Community Based rehabilitation team until such time as the patient is able to participate in an active rehabilitation programme. The delivery of care according to a Rehabilitation Model of Care is critical and a number of residential aged care facilities need to be specifically geared to providing these services

Key Directions

- ✓ *Provision of Rehabilitation inpatient services across two sites – ATR wards at Middlemore Hospital and the Rehabilitation Centre at Manukau campus (General Rehabilitation and Spinal Rehabilitation).*

- ✓ *Co-location of ATR wards at Middlemore Hospital adjacent to related acute wards with greater ability to care earlier for patients with lower level of physiological stability.*

- ✓ *Rehabilitation services involved early in the care of acute medical and surgical inpatients through support in developing and implementing functional maintenance programmes following hospital admission, consultation and assistance with safe discharge to home/residential care with rehabilitation services providing community based rehabilitation, and early "pulling" of patients requiring admission to an ATR ward.*

- ✓ *An increase in the number of frail elderly and geriatric medicine patients admitted directly to ATR on hospital admission.*

- ✓ *Development of direct primary care rehabilitation admissions to Manukau for assessment, treatment and rehabilitation of physiologically stable patients.*

4.5.3 Spinal Rehabilitation

The Spinal Unit will be a defined unit within the Manukau Rehabilitation Centre, located adjacent to the general rehabilitation and Mental Health Services for Older People wards. While retaining its own unique identity and focus to Spinal Rehabilitation, the unit will benefit from greater flexibility of allied health and nursing workforce, and better ability to flex bed numbers. A further advantage is improved access to visiting surgical (particularly orthopaedic, plastics and urology) and medical specialists to the Manukau SuperClinic, improved on-site 24 hour medical access, and closer collaboration between specialist medical staff in Spinal Rehabilitation, Medicine for the Elderly, and general rehabilitation.

The new facility will be designed to promote early and appropriate independence and self-responsibility e.g. single rooms with ensuite bathrooms, shared dining and lounge areas.

The sense of identity and community ownership of the Spinal Unit is important to Spinal Cord Injury patients from throughout the northern half of New Zealand who enjoy a strong "community" association with "their" unit. Branding of the new unit will retain the unit's identity as a Regional Service focusing on the full range of services provided by a Spinal Team.

Earlier admission to specialized, interdisciplinary spinal cord injury care is associated with reduced length of total hospital stay and greater and faster rehabilitation gains with fewer medical secondary complications (especially pressure sores).[12] Greater on–site medical presence and improved ease of review will support earlier transfer of Spinal Cord Injury surgical patients to the unit. Patients who have received their surgical fixation in another DHB will be transferred directly to the Spinal Rehabilitation Unit at Manukau. The Spinal Rehabilitation Team will provide contact and commence the Spinal Rehabilitation Programme during acute hospitalisation at Middlemore Hospital, with immediate transfer of the patient to the Spinal Rehabilitation Unit following acute spinal stabilisation.

Developing support services that encourage and facilitate a patient to participate and integrate into their home community is essential. As a regional service, improving coordination of discharge for patients from outlying DHBs will be achieved through working with staff from the DHB of domicile to ensure smooth patient discharge and care in the community. This is integral to reducing the total length of stay and minimising post-discharge complications.

Patient and caregivers receive education on nutrition and exercise specific to spinal cord injury as part of their acute rehabilitation programme. This is aimed at reducing cardiac and respiratory complications that are associated with having a spinal cord injury.

ACC patients with Spinal Cord Injury are case managed by an ACC Case Manager who ensures that all necessary support services are in place on discharge home. For patients

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[12] Spinal Cord Injury Evidence www.icord.org p.6

who do not meet the criteria for ACC cover, case management is provided by NASC or Spinal Unit staff. Whilst inpatients, the Keyworker as part of the MDT acts as Case Manager for Ministry of Health funded and Private Patients. In the community, MoH funded patients – under 65yrs Taikura Trust, over 65yrs NASC.

All spinal unit clients are monitored 'for life'. "For life" monitoring process where on discharge the patient will be seen twice within the first two years for a MDTeam Reassessment. Thereafter outpatients are seen every three years at clinic with remote (telephone based contact) the intervening years. Clinics are held weekly at ASRU and once a month at various venues around North Island. Specialist medical and Urology Clinics are also held.

Outreach clinics are provided by the Spinal Unit Multidisciplinary Team to DHBs throughout northern New Zealand. The Spinal Unit outpatient team and Clinical Nurse Specialist act as a resource locally and to staff in other DHBs - providing ongoing support to spinal cord injured patients and developing guidelines on specific care needs of Spinal Cord Injury patients (e.g. pressure area care in community).

As depression and other mental health problems are a common consequence of SCI, the rehabilitation process must ensure that a patients mental health needs are met, both in the acute phase and following hospital discharge. For patients from other DHBs this includes establishing links to Mental Health services in their area prior to being discharged home.

There are a number of new advances under development in surgical treatment and stem cell research. Over the next twenty years, these are expected to deliver different and better outcomes from surgical and spinal rehabilitation. The Spinal Model of care needs to be flexible and able to adapt to medical and treatment advances to ensure CMDHB have access to world class services.

Transition accommodation is an important aspect of ensuring spinal patients are able to cope function safely on discharge from inpatient rehabilitation. Transition accommodation will be met for CMDHB residents with small purpose built units as part of the Manukau site as well as partnerships with Manukau City Council for accessible motel units that may be accessed by patients and family. It is likely that these arrangements can be used also for other rehabilitation patients

CMDHB orthopaedic service will continue to provide spinal fixation surgery for local residents and those DHBs where spinal surgery is not provided. Other spinal cord injury patients will receive necessary spinal fixation at their local DHB. There is a strong orthopaedic presence on the Manukau site with most elective orthopaedic surgery and all outpatient consultation being provided at that site. This will improve the ability for the orthopaedic service to support Spinal Rehabilitation services and oversight any patients requiring post-operative spinal review, or the provision of elective procedures e.g. tendon transfer

Key Directions

- ✓ *Retaining identity of Spinal Unit within the new Rehabilitation Centre, focusing of being a Centre of Excellence in the care of Spinal patients.*

- ✓ *Increasingly earlier transfer of patients to the Spinal Unit following Spinal Cord Injury with resultant gains in patient outcomes, reductions in patient complications, and shorter length of total hospital stay.*

- ✓ *Improved access to Spinal rehabilitation beds due to the ability to flex beds and staff between Spinal rehabilitation and general rehabilitation.*

- ✓ *Transition accommodation services will be available for appropriate clients.*

- ✓ *Provision of strong outreach services to other DHBs to assist with community based care post-inpatient spinal rehabilitation, and to local providers caring for spinal injured patients in the community or during episodic hospital admission for other conditions.*

4.5.4 End Stage Conditions

The development of Advanced Life Planning is a key component of avoiding futile interventions and prolonged poor quality of life for a group elderly and frail elderly patients within the Rehabilitation Continuum of Care. The Specialist Rehabilitation Team will work with Primary Care and other specialist teams to introduce Advanced Care throughout the Counties Manukau district.

For a number of patients on the Rehabilitation Continuum, end-stage conditions will necessitate referral to or consultation with the Palliative Care service. Critical is ensuring that there is flexible and compassionate care to meet the different needs of patients.

Key Directions

- ✓ *An Advanced Care planning programme being introduced in Counties Manukau will support quality decision-making around end of life care.*

- ✓ *Integrated options for Palliative Care is available across multiple settings, with support and leadership from the Counties Manukau Palliative Team and Hospice.*

- ✓ *Home, continuing residential, hospice or hospital-based care for palliative care conditions.*

- ✓ *Increasing access to hospice care for patients with conditions other than cancer to support patients across multiple care continua.*

4.5.5 Integration, Teamwork and Care Coordination

There are many methods for improving coordination. These include heightened client participation and ownership of their goals and aspirations, inter-sector/agency networking, government regulation or policy, coordinator/case management, and local integration projects with pooled funding for a limited group of clients. Considerable leadership within the rehabilitation and support service sectors is required in this area to achieve these outcomes. (CMDHB Rehabilitation Scoping Study, page 8)

The multiple complexities within the Rehabilitation Continuum of Care, necessitate improving integration, teamwork and care coordination and this will be achieved through a number of mechanisms:
- Technology (e.g. IT systems between providers).
- Improving relationships both across the health sector and intersectorally closer physical co-location of specialist and primary care.
- Changes in the models of care and to deliver responsive systems across the continuum.

Acting as the hub for Rehabilitation Services across Counties Manukau, the Rehabilitation Centre will play a major role in changing the way that rehabilitation services are provided locally.

> *It is recognised that to reduce inequalities the Rehabilitation centre will provide key functions such as increasing community awareness of available services and advocating for individual clients to facilitate equal access to services and resources, client education/knowledge transfer and coordination of service to better meet client needs, goals and life aspirations. (CMDHB Rehabilitation Scoping Study 2005)*

Responsibility for medical care transfers from the rehabilitation Specialist to the patients GP. The Specialist team is responsible for ensuring that the GP is kept fully informed about the patients Specialist treatment and any community based rehabilitation programme. Robust specialist clinic and hospital discharge with appropriate Specialist advice to primary care, will

support primary care in managing more intense patients in the community, and free up resources of Specialist services to respond to urgent primary care referrals.

Within the rehabilitation continuum a specialist Community Geriatrician will work in collaboration with Primary Care and Specialist Care teams to promote community based solutions, prevent avoidable hospital admissions, and provide support for GP's to manage high complexity frail elderly in the community. This can occur through undertaking specialist reviews in PCHC or private practices, support and advising General Practitioners on the management of rehabilitation patients and supporting GPs with the implementation of Advanced Care planning.

Development of the multidisciplinary team with an interdisciplinary, participatory and client-driven goal setting approach will be the foundation for expanding the rehabilitation continuum. A Multidisciplinary Team approach will be required for all chronic care patients. Teams need to have flexible membership across professional groups and settings of care, and to operate based on the needs of patients or patient groups. For many patients cross-specialty consultation and treatment across subspecialty teams will be paramount to optimising patient treatment outcomes.

The Home Health Care District Nurses provide community-based care allowing for good communication and liaison with the Primary Health Care Teams in their area. DHB strategies to improve electronic information transfer (e.g. discharge letters and electronic referrals) will support effective transfer of clinical information.

Specialist Gerontology Nurses as part of the Specialist Teams, alongside Community Gerontologists and allied Health Workers will support community care; provide assessment; provide advice to Residential Care on patient management, support streamlined admission to acute and Rehabilitation services, and liaise with palliative care teams and hospices.

Working across acute orthopaedic wards and other in-patient and community settings within the Rehabilitation "in-reach" model, specialist Spinal Nurses will provide support for pressure ulcer care and ADL management of Spinal Cord Injury patients to prevent avoidable complications for hospital admissions, and provide advice to staff in other DHBs when requested.

To address the limited emphasis on vocational rehabilitation for a disabled person, there will be more inter-sectoral collaboration between the Ministry of Health Disability Services Directorate, Needs Assessment and Service Co-ordination (NASC), the Ministry of Social Development, and ACC in the purchasing of vocational rehabilitation services for disabled people.

Information infrastructure that enables multi-provider engagement and long-term management of clients is a priority

The PATHS (Providing Access to Health Solutions) Programme

. Paths is a joint initiative between CMDHB, Work and Income and the Ministry of Social Development (MSD) and the NGO and community sectors to assist people in receipt of either the sickness or invalids benefit receive appropriate health care so that they may return to work. The programme is voluntary and aims to identify physical/disability conditions including mental health that may limit a return to work[13].

Key Directions

- ✓ *Promoting the development of flexible teamwork using multidisciplinary, cross- specialty consultation, GP peer consultation and Community Physician consultation by GPs.*

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[13] CMDHB Intersectoral Action Plan 2005

- ✓ *Resolve privacy issues that limit effective communication and develop systems providing maximum benefits to patient care.*

- ✓ *A service review of Allied Health will need to be commissioned to look at how these resources are best used.*

5.0 Changing Facilities at CMDHB

Significant changes to facilities in CMDHB will respond to and support the changing Models of Care across Counties Manukau

The most significant facility change for the Rehabilitation Continuum is the development of the Rehabilitation Centre at Manukau that will act as the hub for a service that is increasingly community-based. With progression in planning movement to this new facility, the Rehabilitation Services will develop as a centre of excellence, encouraging intersectoral collaboration and strengthening multidisciplinary Team processes and reducing the boundaries between specialist services, primary care and residential care.

Middlemore Hospital will have two wards providing Rehabilitation and ATR Services . Being located adjacent to an Orthopaedic or medical ward, these patients will have greater synergies for the early and appropriate transfer of patients – supporting the 'pull' of patients to rehabilitation services. The design of these facilities will be configured to support active rehabilitation - dining rooms, corridors for ease of mobility, ensuite bathrooms, therapy rooms.

Once the decision to build is made more in-depth architectural planning can occur but some key points are outlined that reinforce the nature of the type of rehabilitation facilities that will need to be considered in order for the model of care to be a success

Key Directions

- ✓ *The Rehabilitation Cetnre will provide rehabilitation services that are configured to avoid unnecessary patient transfers with continuing upskilling of staff and adoptionof evidence based practice. The Rehabilitation Centre will manage appropriate direct referrals from General Practitioners and transfers from medical/surgical services for post-acute care.*

- ✓ *New Rehabilitation Centre will be needs rather age-based services within the boundaries of external agencies and funding.*

- ✓ *Rehabilitation centre will be structurally attached to the full range of services on the Manukau site for ease of patient transfers for clinical investigations etc. Rehabilitation inpatient requiring specialist input (medicine and surgery) will be able to receive this as ward consults from visiting specialists to Manukau SuperClinic.*

- ✓ *The Rehabilitation Centre will be adjacent to the inpatient Mental Health Services for Older People ward and the Spinal Rehabilitation Unit to allow flexing of beds to accommodate changes in service demand over the short and long term, promote shared care between medical, allied health and nursing teams.*

- ✓ *The Rehabilitation Centre environment will create an environment appropriate for the delivery of comprehensive rehabilitation care e.g. ensuite, dining rooms* and small meeting areas, outdoor area.

6.0 Workforce Implications

Large forecast growth in the number of elderly (causing the expansion of both residential care beds and community-based home care for the elderly), will significantly increase the number of staff employed in the aged-care sector. Providing increased support from specialist

gerontology nurses into residential and home settings, will promote better care through advising and supporting care delivery.

Increases in the numbers of specialty-trained rehabilitation nurses and allied health specialists will be required to service the additional rehabilitation inpatient beds and support the "in-reach" into acute rehabilitation wards.

An increase in the number of medical specialists will be required to support the higher number of elderly patients in the community. Increasingly services will be more community-focused with more input from the specialist teams into maintaining patients in the community and avoiding hospital admissions. Specialist Drs, nurses and Allied Health Practitioners will need to be trained to focus on a Model of Care that is community based - rather than focused on inpatient rehabilitation beds. Specialist services will have a responsibility to support training and development of GPs and Primary care teams in providing care for increasingly complex elderly patients in residential care and under the care of the Home Health Care Team

In order to grow workforce capacity for medical staff, it will be important to offer rotational positions to junior doctors and allied health professionals so that their expertise in rehabilitation and care of the elderly can be enhanced.

Key Directions

- ✓ *Significant increases in the number of caregivers required with associated needs for training to promote ongoing community based care which support functional maintenance, caring and compassion.*

- ✓ *Significant increases in the numbers of trained allied health, nursing and medical staff (both gerontology and rehabilitation medicine) experienced in rehabilitation and comfortable at working across residential, community and inpatient care. Additional training needs to be available in gerontology and rehabilitation.*

- ✓ *Ongoing education and support for GPs and Primary Care to manage the increasing number of* elderly patients with complex medical conditions living at home or in residential care.

7.0 Funding Issues in Rehabilitation Services

The Rehabilitation Continuum at CMDHB is focused on patients accessing care based on their capacity to benefit - rather than funding source, age or diagnosis. Providers across the Rehabilitation Continuum of Care will continue to operate across multiple funding streams both within health and at the interface with other sectors. Increasingly, CMDHB will play a leadership role in working with governmental agencies to eliminate boundaries that create gaps or discrepancies in patient care due to funding streams.

There are three main funding streams across the Rehabilitation Continuum of Care in NZ - ACC, Ministry of Social Development and Ministry of Health. CMDHB will continue to build on existing relationships with these three main funders to design and provide services that can be needs based and focused on the patient's rehabilitation journey.

Key Directions

- ✓ *CMDHB will work within existing resources to reduce financial barriers to care.*

- ✓ *CMDHB will provide local leadership in working to address gaps and discrepancies between the funding streams available to patients.*

Table3 : Funding Streams for Rehabilitation Services

MOH Disability Services Directorate	**CMDHB Population Based Funding**	**ACC**	**Ministry of Social Development**	**Private/Personal**	**Pacific Island governments**
Young Persons Disabliity (YPD) contract between MOH and CMDHB	AT&R over 65 stroke rehab inpatient	Spinal Rehabilitation contracts	PATHS :	Insurance company for non residents with health insurance	Plastics
Home Health Care (nursing and allied health)	Needs Assessment Service Coordination (NASC) over 65 years for long term support services	Non acute inpatient rehabilitation		Private payers – non residents without insurance	Spinal Rehabilitation
Interface with: Taikura Needs Assessment and Service Coordination (under 65 years) for long term support services	Rheumatology Cardiac rehabilitation	Home Health Care Nursing			

References:

Making the Shift: A Review of NHS Experience. Helen Parker. University of Birmingham Health Services Management Centre. July 2006

CMDHB Rehabilitation Scoping Study December 2005