

A GUIDE TO UPPER LIMB SURGERY



FOR PEOPLE WITH TETRAPLEGIA

INTRODUCTION

Surgical techniques for restoring hand and upper limb function in people with tetraplegia are now well established. They have been undertaken at the Burwood Spinal Unit since 1982 and close to 200 people in New Zealand have had reconstructive surgery. Two detailed published reviews of the Burwood results in 1991 and 2001 have demonstrated that good outcomes are maintained and in fact improved over time.

The aim of this booklet aims to provide information about:

- ▶ The different techniques that are available
- ▶ The Rehabilitation process
- ▶ Possible complications
- ▶ Information on the facilities available at Burwood.
- ▶ Contact details of staff at the Burwood & Auckland spinal units.



Contents

FOLLOWING CERVICAL SPINAL CORD INJURY	2
ASSESSMENT FOR UPPER LIMB SURGERY	2
<i>PRE SURGERY ASSESSMENT</i>	2
RESTORING ELBOW EXTENSION	3
(DELTOID - TRICEPS SURGERY)	
<i>SPECIFIC SURGICAL PROCEDURES</i>	3
<i>AIMS OF SURGERY</i>	3
RESTORING FINGER THUMB AND OR MOVEMENT	4
<i>SPECIFIC SURGICAL AND PROCEDURES</i>	4
SUMMARY OF SURGICAL PROCEDURES FOR THE HAND	5
<i>YPES OF TENDON TRANSFERS</i>	6
<i>IMPACT OF SURGERY ON EXISTING FUNCTION</i>	6
<i>COMPLICATIONS OF UPPER LIMB SURGERY</i>	6
<i>ONCE YOU HAVE A SURGERY DATE</i>	8

Contents

ACCOMMODATION FOR RELATIVES	10
PEOPLE INVOLVED IN YOUR REHABILITATION	11
USEFUL INFORMATION	14
EDUCATION FOR PATIENTS AND THEIR FAMILIES	17
MAP OF BURWOOD HOSPITAL	18
MAP OF BURWOOD SPINAL UNIT	19
RIGHTS & RESPONSIBILITIES	20

CERVICAL SPINAL CORD INJURY

The function retained in each upper limb depends upon the level of injury to the spinal cord in the neck. The higher the injury the less function is retained. The most common site of injury is between the 5th and 6th cervical vertebrae and the function that usually returns to the arm is the ability to:

1. Fully elevate the arm at the shoulder
2. Fully bend (flex) the elbow with normal power
3. Extend the wrist (but this may not be of full power)

In an injury lower in the spinal cord eg. between the 6th and 7th vertebrae retention of elbow, finger and thumb straightening is likely in addition to the above.

ASSESSMENT FOR UPPER LIMB SURGERY

Any person who has residual upper limb and hand weakness following their SCI is encouraged to be assessed for upper limb surgery options. A preliminary assessment is available at one of the spinal units (Auckland or Burwood) outreach clinics. A referral is then made to either one of the fortnightly hand surgery assessment clinics at Burwood Spinal Unit or the twice yearly clinics at Auckland Spinal Rehabilitation Unit depending on which clinic is geographically closer.

PRE SURGERY ASSESSMENT

Six Month Post Discharge

At approximately six months following discharge from the Spinal Unit the hand surgery team will carry out the first assessment regarding possible options for upper limb surgery. This involves a thorough examination of the upper limbs to establish which muscles are still working and what strength they are. Joints are assessed for suppleness and the pattern of finger and thumb motion as the wrist is moved from the fully flexed to the fully extended position. It is very important that the fingers provide a stable platform for key pinch reconstruction. (figs 1 & 2)

The options for surgical reconstruction are discussed with the tetraplegic person taking into account the availability of spare muscles for transfer and the particular needs and desires of the person. If the person wishes to proceed with surgery a final decision is made regarding the surgical options to be used which may be different for each upper limb depending on the muscles available and the specific needs of the person. Eg., a strong key pinch may be wanted on the dominant hand and a strong grasp on the other hand. The surgery date is decided upon accommodating the desires of the person as much as possible.



Fig 1—Poor finger positioning for key pinch



Fig 2—Ideal finger positioning for key pinch

RESTORING ELBOW EXTENSION (DELTOID - TRICEPS SURGERY)

SPECIFIC SURGICAL PROCEDURES

This is the name given to the procedure which restores the ability to straighten the elbow against gravity. It involves taking a portion of a shoulder muscle (the posterior deltoid) detaching it from one of its bony attachments and elongating it by means of a spare leg tendon so that it can be reattached to the triceps muscle close to the elbow. Thus the muscle which previously assisted in elevating the shoulder now actively straightens the elbow.

AIMS OF SURGERY

1. To restore the ability to straighten the elbow against gravity.

Fig 3

Functional Advantages

- a. Enables the person to reach out above shoulder height without the risk of the arm collapsing. It is particularly useful for activities such as taking objects off a shelf or a cupboard, switching off lights, removing covers when lying in bed.
- b. Improve manual propulsion of the wheelchair as the ability to push forward on the wheels is restored.
- c. Greatly improve the ability with independent transfer and relieving pressure on the buttocks.
- d. Often assists with the ability to change position as a pressure relieving manoeuvre whilst lying down.



Fig 3

Tendon Transfers

To join the posterior deltoid tendon to the triceps muscle tendon grafts are required. These are taken from 2 of the 4 hamstring muscles behind the knee. The process of getting these tendons is similar to that used for knee re-construction procedures in the able bodied person. It does not affect the function of the knee.

Rehabilitation

Following the operation, the person returns to the ward with arms in braces to keep them straight. They remain in the crucifix position with the arms out on the bed for a period of 2 weeks. During this time the physiotherapist will slowly begin to move the arms into the side.

The person is then mobilised into an power wheelchair. They commence twice daily gym sessions, where the physiotherapist will teach how to use the new muscle. The arms are slowly bent, at 15° a week until they reach 120° flexion. Once this is reached then functional skills will be commenced. This may include pushing a manual wheelchair, transfer's and bed mobility. Some people will do this as an outpatient in their local area.

Total rehabilitation time – 10 – 12 weeks.

RESTORING FINGER THUMB AND OR MOVEMENT

SPECIFIC SURGICAL AND PROCEDURES

A. Restore key pinch function of the thumb

Functional Advantages

Strong key pinch against the side of the index finger enables a range of activities such as holding onto utensils, and crockery, turning pages in books and newspapers, turning keys, doing up zips, writing etc.

B. Restore Finger Grasp

Functional Advantages

Strong grasp enables the tetraplegic person to grasp larger objects such as jars, bottles, cans, shavers, glasses, electric toothbrushes etc without requiring splints. It also enables holding onto pushrims of a manual wheelchair especially pushing up ramps/kerbs.

Rehabilitation

Bed rest – 2 – 4 days depending on recovery and pain post-op.

Followed by discharge from the BSU back home – usually with increased attendant care as both arms will be in plaster (see page 8).

At the end of the fourth week the patient will return to the BSU/or ARSU for removal of plasters and rehabilitation. This is usually for 7 – 14 days. The amount of time spent back at the unit is dependant upon the need to push their manual wheelchair and the ADL skills needed to regain prior to discharge home.

Total rehabilitation time: 6 weeks

Fig 4 Demonstration of key pinch and finger grasp following surgery



Fig 4



SUMMARY OF SURGICAL PROCEDURES FOR THE HAND



Key Pinch with Strong Wrist Extension

The muscle used for transfer into the thumb is a spare elbow flexor called brachioradialis. The tendon of this muscle is detached from the forearm bone and then woven into the tendon that normally powerfully bends the thumb. This does not cause any weakening of the wrist. This then allows for a strong key pinch which will give you the ability to hold a fork, spoon, toothbrush, pen etc without the use of splints.



Finger Grasp in Presence of Strong Wrist Extension

When there is strong wrist extension it is usually possible to take one of the two available wrist extensor muscles and transfer it into the four tendons which bend the fingers. Functionally this gives you the ability to grasp larger objects, such as a water bottle, jars etc. It also gives you the ability to grasp the push rims of your wheelchair which is particularly useful when pushing up ramps, or when bending over to get things off the ground



Key Pinch without Strong Wrist Extension

If wrist extension is weak then the brachioradialis muscle is transferred into a wrist muscle in order to provide strong wrist extension. The key pinch is then provided by tethering the thumb tendon into a forearm bone such that when the wrist is cocked back the pulp of the thumb is pulled firmly against the side of the index finger. This enables it to be used for the key pinch functions outlined above. The key pinch is released by using gravity to drop the wrist. Functionally this will also give you the ability to hold a fork, spoon, toothbrush, pen etc but the strength of the key pinch is dependant on how much you can extend your wrist



Finger Grasp without Strong Wrist Extension

In this situation there will not be a spare wrist muscle for transfer and instead finger grasp can be achieved by tethering the finger tendons into the main forearm bone, so that when the wrist is cocked back the fingers are pulled down into the palm which enables satisfactory grasp as outlined above. Again the fingers are released when the wrist drops forwards under the influence of gravity. Functionally this also gives you the ability to grasp larger objects although the strength of the grasp is reliant on the strength of the wrist extensors.

TYPES OF TENDON TRANSFERS

Muscle tendon transfers

These are the main stay of reconstructive surgery and involve transferring spare muscles with their tendons to a new site so that it performs a new function such as key grip or finger grasp. These new functions are normally very quickly learned by the tetraplegic person.

Tenodeses (tendon tethers)

It is usual to perform one or more tenodeses across joints to maximise the number of functions a single transferred muscle can undertake.

For example, the tendons of the paralysed finger grasping muscles are anchored into the forearm bone so that the fingers will “grasp” when the wrist is extended.

Joint Stiffening

Sometimes it is necessary to stiffen one of the thumb joints in order to provide a precise key pinch against the side of the



figure 5

IMPACT OF SURGERY ON EXISTING FUNCTION

Some aspects of existing function may be affected following the upper limb surgery but these are compensated for by the acquisition of a much greater range of new functions. It is important that any special existing functions that the tetraplegic person wishes to retain after the surgery be discussed with the surgeon as the surgery can usually be tailored to meet any special requirements.

It is important to note that all surgical procedures are reversible.

COMPLICATIONS OF UPPER LIMB SURGERY

Any type of surgery does have complications despite every possible care being taken. Fortunately in relation to upper limb surgery for the tetraplegic complications are few and are as follows:

Failure of Function of the Transferred Muscle and Tendon

There are a number of possible reasons that need to be evaluated if this complication occurs.

► Tendon Dehiscence

The major complication is “giving way” or “pulling out” of the muscle tendon transfer or tenodesis. Often this is relatively minor and has no significant impact on final function. Occasionally it is more serious resulting in a major function failure and will require reoperation to reattach the tendon followed by a further four week period of immobilisation.

► Scar Adhesions

Another infrequent cause of failure is that the transferred muscle and tendon become stuck down by scar tissue during the period of immobilisation. This requires surgical release followed by immediate mobilisation to prevent it happening again.

► Transfer too tight or too loose

When a muscle with its tendon is transferred or a tenodesis performed the surgeon has to judge the correct tightness in order to achieve the correct balance between the fingers and

thumb. Sometimes during the rehabilitation process it is realised that the balance is not correct which has a negative effect on the expected hand function. Often this can be corrected by appropriate splintage but other times another usually more minor surgical procedure is required to correct the imbalance.

► **Difficulties activating the transfer**

Sometimes despite everything being in working order the tetraplegic person is unable to voluntarily activate the transfer. This represents poor coordination between the brain and the transfer which can be resolved by special therapy techniques.

► **Infection**

As with any surgical procedure wound infection is a possibility. It is an uncommon event and readily responds to appropriate antibiotics given at the first signs of any infection.



**ENQUIRIES FOR FURTHER INFORMATION WILL BE WELCOMED
DETAILS OF CONTACTS ARE ON THE FOLLOWING PAGE**

ONCE YOU HAVE A SURGERY DATE

Deltoid - Triceps Surgery

This is a 10-12 week stay in hospital

What you will need to bring to hospital:

- ☐ Power wheelchair and/or manual wheelchair.
- ☐ Loose short sleeved clothing to allow for access to the arm braces during physio.
- ☐ 1 weeks supply of prescription medications.

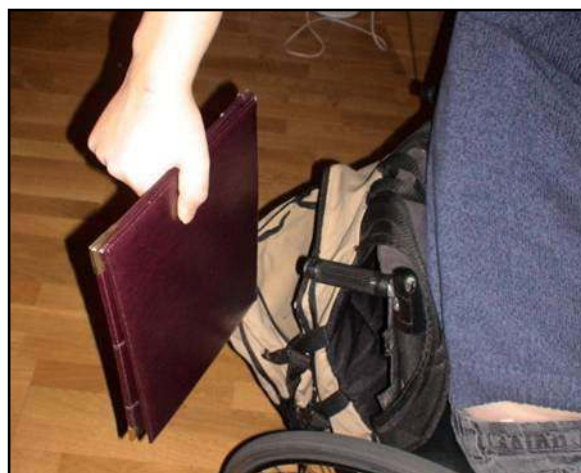
Forearm Tendon Transfer Surgery

In hospital initially for 7 days for surgery and recovery, then discharged home for 3 weeks with arms in plasters. It is important that the home environment is set up. When the arms are in plaster a power wheelchair and a hoist will be required, ie no pushing and no transfers. Some people will need to increase the amount of attendant care they have during this time.

If you do not have a power wheelchair, hoist or attendant care please contact the therapist at BSU so this can be organised prior to admission

What you will need to bring to hospital

- ☐ Power wheelchair.
- ☐ Loose clothing to go over plasters on your lower arms.
- ☐ 1 weeks supply of prescription medication.



Enquiries for further information will be welcomed by:

Jennifer Dunn,
Physiotherapist, Burwood Spinal Unit, Christchurch
phone (03) 3836850 or
email at jennifer.dunn@cdhb.govt.nz

Jacqui Prakasim,
Occupational Therapist, Auckland Spinal Reablation Unit,
phone (09) 246 0044 Ext. 4340 or
email at jacqueline.prakasim@middlemore.co.nz

Professor Alastair Rothwell,
phone (03) 3640430
email alastair.rothwell@chmeds.ac.nz

Comments:



BURWOOD SPINAL UNIT ORIENTATION



Accommodation for Relatives

There is a variety of accommodation available on site however availability depends on how busy the Unit is.

Hostel

Relatives accommodation may be available in the Nurses Hostel which is located on the hospital grounds.



Whanau a Whare

Whanau ā Whare' is a marae style accommodation, It is available for whanau who have a family member in Burwood Hospital. Whanau can stay for agreed and negotiated periods of time, and may be asked to share the whare with other whanau.



Tapper & Milner Units

The Tapper Units & Milner Lodge are available for mid to longer-term stays, if not being used by patients, toll bars have been placed on each phone you will have to go through main reception for out side calls, the units are serviced once a week, email can be accessed through the ABC Library. Patients may transfer to the tapper Units and/or Milner Lodge later in their stay. To contact the accommodation coordinator phone (03) 383 6850 Mon - Fri 0830-1630

People involved in your Rehabilitation

In the Hospital Ward...

CLINICAL DIRECTOR

The Director is the head of the Burwood Spinal Unit and is responsible for maintaining the high quality level of care offered to you. The Director may also be involved directly in your care.

SPINAL CONSULTANT

A spinal consultant will coordinate your medical care and rehab programme.

REGISTRAR AND HOUSE SURGEON

The Registrar and House Surgeon are doctors who are available daily to help you with any medical concerns you may have and to monitor ongoing treatment. They will also act as a liaison between you and your Spinal Consultant.

CLINICAL CHARGE NURSE

The Clinical Charge Nurse is responsible for the smooth running of the ward. He/she ensures that staffing levels are adequate and that all safety issues are addressed.

CLINICAL NURSE SPECIALIST

The Unit has two Clinical Nurse Specialists, one involved in acute, and one in rehab care. The unit also has one CNE (Clinical nurse educator) who provides ongoing education, training and support for ward staff.

TEAM NURSES

You will have specific nursing staff to ensure continuity of your care during your rehabilitation. Your Team Nurse will help look after any changes in your nursing care and, where possible, attend all meetings with you and your team. Your Associate Nurses will help you in many aspects of your daily care and recovery.

URODYNAMICS

The Urodynamics (*Uro*) team will help you to look after your bladder.

HEALTH CARE ASSISTANTS

Specially trained Health Care Assistants will often assist you and the Nursing teams with some of your cares. The Health Care Assistants help out in many ways in the unit and are always on hand to offer you assistance.

RETURN TO WORK SUPPORT

The New Zealand Spinal Trust runs the Kaleidoscope Programme that will help you get back to work. They will get involved early in your stay at Burwood to encourage you that if you want to, you will go back to work. If your current job is one that you can return to, Kaleidoscope will help keep your employer up-to-date on your progress and coordinate a realistic return to work plan for you. If you need to consider a new form of work, the Kaleidoscope team will help you discover what your talents and skills are and then you can choose what type of work will best suit you.

PHYSIOTHERAPISTS

Your Physio will assist you from admission through to the day you return home. They will assist you to achieve the highest degree of function following your upper limb surgery.

OCCUPATIONAL THERAPISTS

Your Occupational Therapists (OT) will assist you to become more independent in everything you do. You will learn tips and techniques for personal grooming, dressing, showering and household tasks following surgery.

DIETICIAN

You may find that you need a special diet for a time to help you heal and to balance the effects of medications. You can ask the dietician to help you make changes to your diet to help you meet specific goals.

PROGRAMME COORDINATOR

The Programme Coordinator organises your weekly programme and appointments. The Coordinator also manages on site accommodation including the Hostel, The Tapper Units and Milner Lodge. The Programme Coordinator is a good source of information on activities in and around Burwood and Christchurch, i.e. recreation, and will organise your Mobility Parking Permit through CCS and Total Mobility Taxi Vouchers if applicable.

CLINICAL PSYCHOLOGIST

A Clinical Psychologist is available to you and your family on request or through referral. Services include individual, family or couples counselling/therapy and, if necessary, follow up referrals in your home community, assessment of mental abilities and specific therapies for psychological problems.

SOCIAL WORKER

The Social Worker offers assistance with psychological, emotional and social concerns that can arise for you, your family and friends as a result of your injury or disability. The Social Worker offers the opportunity to discuss your experience of changes in your life and the adjustments you are making in response to these changes. They are able to assist in negotiation for assistance, e.g. accommodation, relevant funding and liaison with government and community services.

RECEPTIONIST

The Spinal Unit Receptionist can assist you and relatives with general inquiries about the Unit and Burwood Hospital.

MAORI HEALTH SERVICE

Burwood Hospital has a Maori Health Service available. Our cultural diversity as a nation means different patients have different views on what is appropriate care and practice. The patients and staff include people from many ethnic societies and our Maori Health Service can help ensure that cultural differences do not impede your progress or care. A Kaumatua-Taupa can also be contacted for support.

MAORI WARDENS

The Maori Wardens help put at ease and support patients and their whanau/family who are at Burwood Hospital.

VOLUNTEER SERVICE

A network of trained volunteers supplements the quality services available for you. Volunteers perform a variety of tasks from maintaining our gardens, delivery of newspapers, running the Mobile Patient Library Service, to assisting with elements of your care.

INTERPRETER SERVICES

If you need the services of an interpreter for you and your family we can arrange this for you.

CHAPLAIN

Ecumenical, Roman Catholic and Maori Chaplains all visit regularly and are available on request. An inter-denominational church service is held each Sunday morning in the Hospital Chapel at 10:30. All are welcome.

STUDENTS

There are often students completing aspects of their training at the Spinal Unit. You may be asked if you would mind allowing a student to be involved in your care. You are not obliged to agree and have the right to refuse. A fully trained member of staff supervises all students and their clinical practice is carefully monitored. Refusing student involvement will not affect your care in any way.

Useful Information

VISITING HOURS

Visiting hours are **1pm - 8:30pm** Monday to Friday and **11am - 8:30pm** on weekends and public holidays. Please ensure your guests, family and whanau are aware of these hours. There are occasionally times where these hours may be extended due to individual needs (e.g. special needs, communication barriers, deteriorating patient conditions). Visitors are welcome in the Gym but for afternoon sessions only please.

MAIL & PACKAGES

Address for mail:

Burwood Spinal Unit
Private Bag 4708
Christchurch

Address for the courier:

Burwood Spinal Unit, Burwood Hospital
255 Mairehau Rd
Christchurch

EFTPOS FACILITIES

Currently you can withdraw \$20.00 when purchasing something from the Travis coffee shop

PET VISITS

Pets are an important part of people's lives. If a family member or friend wishes to bring a pet to visit, please talk to the Clinical Charge Nurse or Nurse in charge about the visit as we may need to make suitable preparations.

OUTINGS

If you intend to leave the hospital for an outing, please notify nursing staff so that they can organise a medical consultation beforehand. This allows staff to provide you with additional advice and service to ensure you have a successful and safe outing. Let staff know if you will be returning late in the evening so they can arrange care for you on your return.

Christchurch is very accessible with many services available have lots of fun!

Accessible low-floor **BUS** services operate daily from Mairehau Road. Route 60 will take you directly into the city centre via The Palms mall, or to New Brighton. Many other routes operate daily, i.e: from the Palms you can connect with the Orbiter Bus Service (timetables available from reception).

Wheelchair **TAXIS** need to be booked, you can do so through the following:



Gold Band Ph: 379 5795 (cars & wheelchair taxis)

Blue Star Ph: 379 9799 (cars)
Ph: 379 9788 (wheelchair taxis)

City Maxi Ph: 343 0399

First Direct Ph: 377 5555

Arrow Taxis Ph: 379 9999

PUBLIC TRANSPORT

The number 60 bus departs from the bus stop directly opposite the hospital entrance. This bus travels past the Palms shopping Mall and ends up in the city centre. A majority of buses on this route are kneeling buses for further information contact Metroinfo Ph: 03 366 8855 or Web: www.metroinfo.org.nz

All of the above will accept Total Mobility Taxi Vouchers which can initially be arranged through the Programme Co-ordinator and are then available from your home area. (Please note, when returning to the Spinal Unit for reassessments or further treatment you will need to bring your own vouchers with you).

The Spinal Unit has a wheelchair van available for hire, this can be booked through the Programme Co-ordinator. Parafed Canterbury also has a wheelchair van that can be booked through the Programme Co-ordinator or Parafed.

SECURITY

The external doors of the spinal unit are locked from **8:30pm – 7am**. Entry to the Unit during this time is via the hospital main entrance. The carpark adjacent to the spinal unit is also closed during this period. Money or valuables can be stored in the Nurses station in a secure lockable cupboard.

MEAL TIMES ON THE WARD

(Time meal trolleys arrive on the ward)

Breakfast is available for you at **7:30am**.

Lunch is available for you at **12:15pm**.

Dinner is available for you at **5:15pm**.

All meals will be delivered to the Spinal Unit Diningroom unless on bedrest.

CAFETERIA & FOOD

Burwood has a Cafeteria where you, your family and friends can purchase lunch and dinner.

Lunch and Dinner hours:

Monday – Friday

9:30am – 1:30pm & 5:30pm – 6:45pm

Weekends;

11am – 1:30pm & 5:30pm – 6:45pm

Tea & Coffee is available all day.

There are also snack and drink machines in the cafeteria. There are also vending machines in the Spinal Unit outside the dining room.



TRAVIS COFFEE LOUNGE

Main entrance of the Hospital open Monday to Friday

MAIN HOSPITAL RECEPTION

The main hospital reception sells newspapers, stamps and phone cards.

There is a coin / card phone situated in the main foyer next to the outgoing mail box.



TELEPHONES / FAXES

All bedrooms have phones for you to use. Dial "1" to get an outside line. Toll calls can be made through the operator by dialling "0". There are also some **hands free headset phones** available so those with limited hand function can make calls in greater privacy. Each room has its own direct dial number. The Spinal Unit reception phone number is 03 383 6850.

As transfer charge calls are no longer available it is cheaper to set up an 0800 number on your home phone or get a calling card instead of making collect calls to keep in touch with your family.

You can send and receive faxes while in the Spinal Unit, the fax number is 03 383 6851. Faxes can be sent via the Spinal Unit reception (there is a small charge for national or international faxes).

CELL PHONES

Please turn **off** your cell phone when in or around the Spinal Unit as the signal can alter settings on medical equipment. Please make sure visiting family and friends are aware of this.

TELEVISION, RADIOS & STEREOS

All bed spaces have an adjustable over bed TV set. There is also a big screen television in the Patients Day Room with Sky TV. We would ask that stereo / radio equipment be small enough to fit on your bed side locker.

LIGHTS OUT

Sleep and rest are important to achieving optimal rehabilitation. Staff will turn off the main lights after **10:30pm Sunday to Thursday** nights. People are asked not to make undue noise once the lights are out.

NEWSPAPER

"The Press" is available Monday to Saturday mornings through the volunteer service. Payment can be made on a daily or weekly basis.

LAUNDRY

You can use the Laundry facilities in the spinal unit to do your private laundry. If you are able to, we encourage you to do your own laundry independently. If you are on bedrest or have a high level of injury the hospital aides will do it for you.

SMOKING, DRUGS & ALCOHOL

Please refer to the Patient Rights and Responsibilities section of this manual.

Education for Patients and their Families

Burwood Hospital and the New Zealand Spinal Trust strongly believe that good information is critical to the success of your rehabilitation. To this end, the Trust and the Canterbury DHB have funded a partnership facility, the Allan Bean Centre.

The Allan Bean Centre for Learning and Research in Rehabilitation

The Allan Bean Centre (ABC) is full of great information and resources for you to make full use of. The Centre is where much of your learning will take place. Rehabilitation is an educational, not a medical process. At the ABC you can gain expert knowledge of your condition. The centre is there to help you achieve a high degree of independent living through a full and meaningful return to your family, work and community.



Computer Training

Computers can open up a world of possibilities for people of all abilities. The ABC has a computer training room equipped with a variety of access technologies such as voice recognition. A trainer is available to demonstrate and train you in the use of computers and software that may increase your independence and help you achieve your goals.

Email and the Internet

Email has become a common and convenient means of communication between friends and family. You have free facilities for sending and receiving email at the Allan Bean Centre Library. If you do not have an email address or account we can easily show you how to set one up.

Mobile Computers

Mobile computers that has voice activated computer that allows patients with higher levels of injury to control their TV and radio, send and receive emails or to surf the web. The unit has Six of these available for patients to use. Over head bed computers are a novel and unique technology that has been developed here in the Spinal Unit.

The New Zealand Spinal Trust

The Spinal Network is an independent organisation dedicated to providing high quality information and contacts for all people with spinal cord impairments, their family/whanau, friends and health professionals. The network produces a quarterly magazine, the *Spinal Network News* that covers a wide range of topics including information on medical issues, travel, product reviews and employment. Membership for The New Zealand Spinal Trust is available by annual subscription or life membership.

Parafed Canterbury

Canterbury is a sport and recreation organisation offering quality sport and recreation services, facilities and equipment for people with a physical disability (including visual impairments). We are based at Burwood Hospital and work with a variety of individuals, families, clubs, schools and organisations in the Canterbury

BURWOOD HOSPITAL MAP

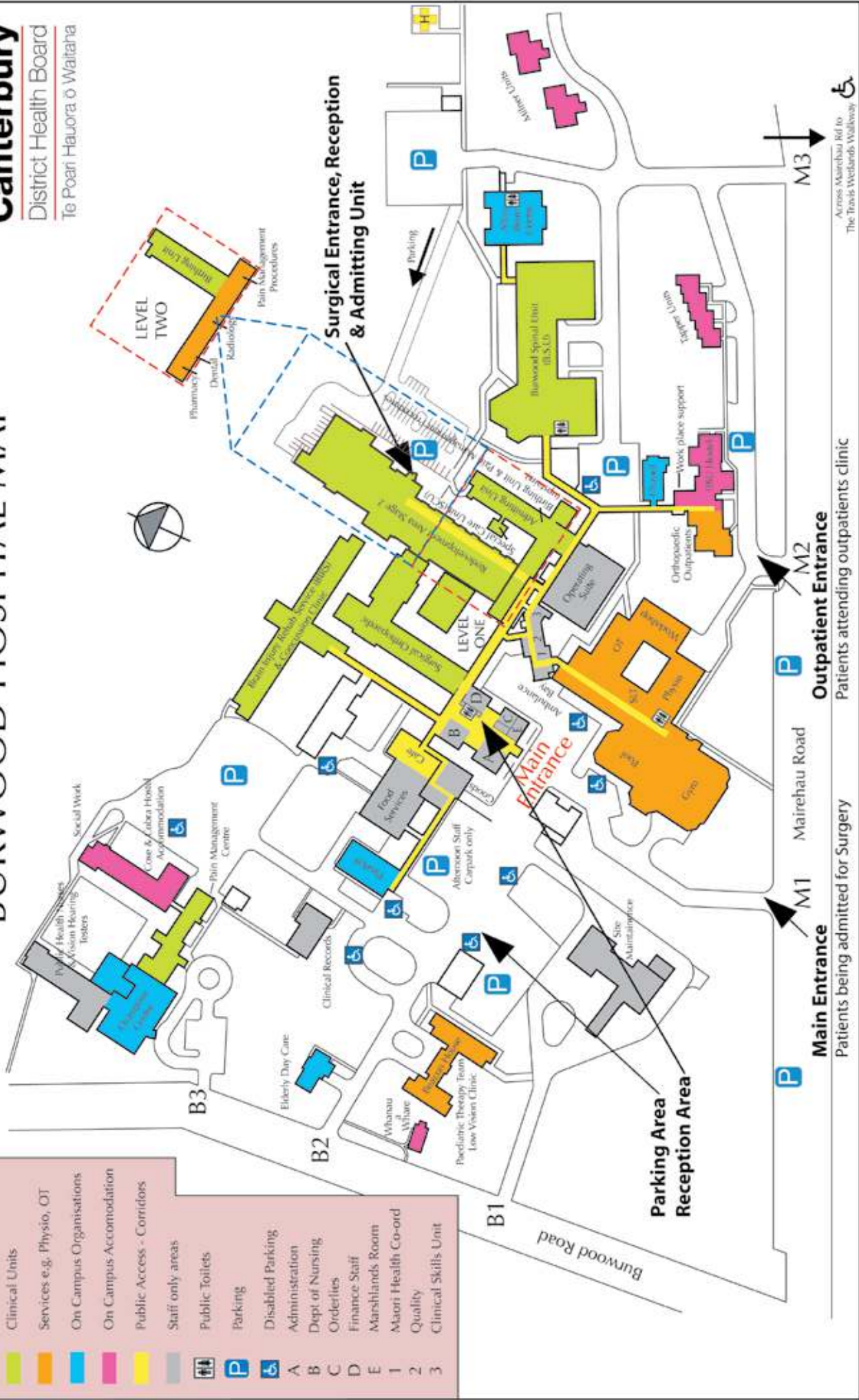
Canterbury

District Health Board

Te Pōari Hauora o Waitaha

Map Key

	Clinical Units
	Services e.g. Physio, OT
	On Campus Organisations
	On Campus Accommodation
	Public Access - Corridors
	Staff only areas
	Public Toilets
	Parking
	Disabled Parking
	Administration
	Dept of Nursing
	Orderlies
	Finance Staff
	Marshlands Room
	Maori Health Co-ord
	Quality
	Clinical Skills Unit



BURWOOD SPINAL UNIT FLOORPLAN



Rights & Responsibilities

Your care is being provided by a publicly owned and funded facility. Patients in New Zealand hospitals enjoy a high standard of personal rights. Rights always go hand in hand with responsibilities as other patients and staff are entitled to rights as well. We ask that you treat all staff and fellow patients as you would want to be treated yourself.

Your Rights

Your rights when receiving service from us are outlined in the Code of Health and Disability Services Consumers' Rights, and these are as follows:

Respect

You should always be treated with respect. This includes respect of your culture, values and beliefs as well as your right to personal privacy.

Fair Treatment

No one should discriminate against you, pressure you into something you do not want, or take advantage of you in any way.

Dignity & Independence

Services should support you to live a dignified independent life.

Proper Standards

You have the right to be treated with care and skill, and to receive services that reflect your needs. All of those involved in your care should work together for you.

Communication

You have the right to be listened to, understood and to receive information in whatever way you need. When it is necessary and practicable an interpreter should be available.

Information

You have the right to have your condition explained and to be told what your choices are. This includes how long you may have to wait, and estimate of any costs and likely benefits and side effects. You can ask any questions to help you be fully informed.

It's your decision

It's up to you to decide. You can change your mind at any time.

Support

You have the right to have someone with you to give you support in most circumstances.

Teaching and Research

All these rights also apply when taking part in teaching and research.

Complaints

It is okay to complain - your complaints help to improve service. It must be easy for you to make a complaint, and it should not have an adverse effect on the way you are treated.

Your Responsibilities

Rehabilitation is a partnership process with you at the centre and your team around you. It will not work effectively without your active participation and cooperation.

Canterbury District Health Board (DHB) staff are committed to working in partnership with you to achieve the best possible outcome. While you are staying at Burwood it is your responsibility to comply with the current laws of New Zealand.

- The theft of any property, personal or public is not tolerated.
- You must not engage in any illegal activities on the premises.
- You must not consume any illegal drugs on the premises.
- No acts or threats of violence will be tolerated.

Your personal responsibilities while at the Burwood Spinal Unit are to:

- Be involved in your treatment and care whenever this is possible and provide staff with all information that could assist with your care and treatment
- Respect other Burwood Spinal Unit patients and staff by refraining from behavior that causes a nuisance, inconvenience or general lack of consideration to others
- Inform us if you believe your rights are not being considered
- Refrain from using indecent or abusive language, physical force or inappropriate behavior
- Respect the property of the Canterbury DHB and do not destroy, damage or deface any article in or on the property belonging to the Canterbury DHB
- Not remove any of the Canterbury DHB property from the premises without our consent
- Report breakages or faults promptly to the Spinal Unit staff
- Respect the privacy of others and keep in confidence any information gained from them.

Smoking

Please note that Burwood Hospital is a smoke free site. Patients will be offered a smoking cessation program. Only exempted patients are allowed to smoke in the designated area outside the Burwood Spinal Unit dining room. Please put your butts in the ashtrays provided.

Alcohol

Please refrain from consuming alcohol on the premises

Drugs

Do not bring any illicit or non-prescribed drugs onto the property

Any offences which break NZ laws will have police involvement.

*“Your rights are **our** responsibilities -
your responsibilities are **others** rights”*

Visiting Hours

The Spinal Unit visiting hours are **1pm - 8:30pm** Monday to Friday and **11am - 8:30pm** on weekends and public holidays. Please ensure your guests, family and whanau are aware of these hours. There are occasionally times where these hours may be extended due to individual needs (e.g. special needs, communication barriers, deteriorating patient conditions). If you need to have guests, family and whanau outside the standard visiting hours please discuss this with the nurse in charge.

Noise Level

The well being of you and the staff is very important; likewise the well being of other patients in the Unit is of equal importance. It is therefore important that we have some restrictions around the use of television, radios and stereos.

Always keep the volume of appliances to an acceptable level. We acknowledge that there may be times that you may have difficulty sleeping and want to watch TV or listen to the radio late at night. In the interests of fellow patients, ear pieces or headphones must be used after 10:30pm.

“It’s great to be alive!”