Welcome to the Prosthetic Rehabilitation Unit

Royal National Orthopaedic Hospital NHS **NHS Trust**







Orthotic and Prosthetic Users Stanmore

OPUS is a voluntary support group working alongside the RNOH Trust for all Orthotic and Prosthetic users, their families, carers and supporters.

Our aim is to provide an effective forum for all users, their families and carers of the RNOH Stanmore's Orthotic and Prosthetic Department. Establishing a network of peer support alongside a positive working relationship between users, the centre and the Trust, provides opportunity to give feedback, input ideas, and voice any concerns about services provided by the centre.

All patients, their families and carers are welcome to join and get involved in events.

Our Aims

To provide a service to users, family and friends. This will include updates on:

- Current news in the Prosthetics and Orthotics department
- News items regarding innovations and research both nationally and internationally
- News from other rehab centres across the country
- Open forum meetings with guest speakers
- Coffee mornings
- Shared understanding and friendship

Contact details



To find out more about the services OPUS provide and the latest news, vist http://opus-rnoh.wixsite.com/usergroup



If you have any questions about OPUS and would like to get in touch, feel free to contact them via email at OPUS-rnoh@outlook.com

Welcome to the Rehabilitation Unit

This welcome book is intended to introduce you to the prosthetic rehabilitation unit. Its aim is to support you through your first appointment and contains information that you may wish to refer to in the future.

To help you get started with confidence as you embark on your new journey, we have compiled a few hints and tips. We hope it will reassure you, and answer many of the questions you and your family may have. Our intention is to provide you with a quality, caring service, and the staff at the Centre are here to help you. If there is anything you do not understand, or if you need assistance of any kind, please do not hesitate to ask.

The service is managed by Clare Tamsitt, the general manager for Medicine and Therapies, the multidisciplinary team includes: Consultant in Rehabilitation Medicine - Dr Imad Sedki

- Prosthetists and clinic assistant
- Technicians and clinical technicians
- Physiotherapists
- Occupational therapists
- Clinical psychologist
- Counsellor
- Health care assistant
- Administrative/secretarial staff

Centre contact details

Prosthetic Rehabilitation Centre Louis Fleischmann Building The Royal National Orthopaedic Hospital Brockley Hill, Stanmore Middlesex, HA7 4LP

Opening hours for booked

020 8909 5505

rno-tr.PRU@nhs.net

appointments: 8:30 - 16:30

Chaperones

The Royal National Orthopaedic Hospital is committed to providing a safe and comfortable environment, where patients and staff can be confident that best practice is being followed at all times. Safeguarding is of great importance to the Trust, therefore we use a coordinated approach in using chaperones during each stage of a patient's rehabilitation.

Patients can find some consultations, examinations, investigations or procedures distressing, therefore may prefer to have a chaperone present in order to support them. It is good practice to offer all patients a chaperone when they feel they require one.

The relationship between a patient and their healthcare professional is based on trust – therefore even if patient and healthcare professional have known each other for a long period of time, the patient is still fully entitled to request/be offered a chaperone to be present during any consultation.

Adjusting to limb loss

Everyone reacts differently to the loss of a limb/s. Limb loss can leave you feeling anxious, vulnerable and uncertain about the future. Your body has experienced a significant change. It is important to remember that your ability to adapt to these changes will become easier over time.



It is completely normal to feel strong emotions. Some people grieve for their loss. You may be feeling scared, angry, frustrated and even sad.

Some common difficulties that you may experience include:

- The ability to complete everyday tasks
- A change to your level of independence
- A difference in your mobility/functionality
- Walking on different surfaces; grass, sand & gravel etc.
- Concerns with your body image and sexuality
- General everyday changes to your lifestyle

Working through your feelings may take time. Remember, you don't have to go through this experience alone, support is available. Make sure you ask for assistance if you need it, whether it's at the beginning of your journey, several months later, or years down the line.

Getting yourself back on track

One of the most important things for many people is getting our lives back to the way it was prior to amputation. Obviously some changes will need to be made and you may experience daily challenges, but in most cases these can be overcome in time.

Returning home or to your place of residence



Heading home for the first time can raise mixed feelings including excitement, anticipation and anxiety for both you and your family.

Moving around a hospital can be very different to navigating your way around your home. Many homes have lots of stairs to access the property, carpet instead of vinyl floors, toilets and bathrooms that are not always easily

accessible, and doorways that are small and difficult to enter or exit.

Ensuring that you are going to a place that is safe and accessible is important. Your occupational therapist will discuss options for modifications and assistive devices prior to your discharge. They may arrange a visit to your place of residence (with you where possible), to discuss your needs.

There are a number of things that you need to consider prior to leaving hospital:

- How you will access your home?
- Is your home accessible to move around?
- Can you get into and out of the shower/toilet?
- It is important that your place of residence is accessible and safe.

Returning to work



Returning to work can be a major milestone to overcome. You may or may not be able to undertake the same role you did prior to losing your limb/s. Many companies offer return to work programs and the Government has programs in place to assist you to make the transition easier. Modifications can be made to the workplace to aid your return and enable you to fulfil your requirements. They

recommend that you stay in contact with your employer during your absence and discuss future opportunities.

Although changes may need to be made and you will face some challenges, becoming an amputee may mean that you can do most of the things you used to do, but in a different way. Sometimes it's just a matter of careful planning, organisation and learning as you go.

> Tips for lower limb amputees

- Remove mats on polished floors and tiles. They are a nuisance for wheelchairs and also trip hazards for prosthetic legs.
- Hand rails for stairs can assist with balance and stability.
- Furniture like coffee tables and hall tables can be challenging to navigate around; place them near walls and out of the way of the main thoroughfare.
- Anti-slip mats for the shower/bathroom floor are safer options and the use of a shower stool, chair or bath-seat can help to prevent trips and falls.
- Your occupational therapist will discuss the option of grip bars in the wet areas (such as the shower, bathroom and toilet).
- Arrange things to be in easy reach so that you are able to do things for yourself.
- Remember if you are unsure of something ask. Healthcare providers are there to help you.

Tips for upper limb amputees

- Regular shoe laces can be exchanged for specialised laces or alternatively you can use shoes which do up with Velcro.
- Devices such as a combined knife/fork can make eating easier.
- Specialised computer keyboards are available for people with one arm.
- Specialised boards are available to make things like cutting, chopping and opening jars easier to manage.



Vehicles can be modified to suit your needs and there are a number of companies which specialise in the re-fit of left foot accelerator pedals, wheelchair hoists and the installation of spinner knobs or hand controls. Some people even manage to ride their motorbikes again. Push bikes and motorcycles can also be modified if required.

Driving may be an important part of your independence. If you have medical approval and your health checks out you will be able to have your licence reinstated by contacting the DVLA.

DVLA drivers' medical enquiries

Tel: 0300 790 6806 Monday to Friday, 8am to 5:30pm Saturday, 8am to 1pm

You can contact the DVLA on www.gov.co.uk/contact-the-dvla to tell them about your driving and medical issues.

Postal address: Drivers' Medical Enquiries DVLA Swansea SA99 1TU

Parking

If walking a long distance is difficult for you, a Blue Badge will assist with close access to venues.



A person may be issued with a Blue Badge if they have a significant permanent ambulatory disability. This refers to a disability that is not likely to improve within the person's lifespan. Application forms can be obtained from your local County Council, or you can apply online through the following web address:

www.gov.uk/apply-blue-badge

To find out more information about ways to claim funding for things like your Blue Badge, visit www.gove.uk/pip/



Going on holidays and travelling is a part of life for most people. Even if you have had an amputation there is no reason why your future travel plans should change. Some important things to consider when travelling is to be prepared and check everything prior to booking your destination.

Most travel agents and travel companies have programs in place to support people with disabilities. If you know that you will require assistance, make sure you ask what is available prior to making your booking.



While many hotels offer accessible rooms not all accessible rooms comply with the UK standard, making it difficult for people to be independent away from home. If you have specific requirements relating to your accommodation needs, speak to a representative from the hotel rather than the appointed booking agent.



Providers of bus and train travel usually have accessible vehicles available for people with disabilities.

There are also disabled person travel passes available, you can apply for these on the government website, visit www.gov. uk/apply-for-disabled-bus-pass for more information.

Air travel

If you require assistance with air travel and need support to go to and from the gate lounge and/or onto the aircraft, advise the carrier at the time of making your booking. If you plan to take assistive devices with you, like your wheelchair, let the airline know at the time of booking.

If you are travelling overseas, it is a good idea to carry any prosthetic lotions or gels with you in your 'carry on' luggage in small bottles up to 100ml. It's also a good idea to take spare socks and liners in your hand luggage.

Some amputees choose to 'carry on' their water/shower limb, rather than risk packing it in checked baggage.

The changing air pressure experienced during a flight can cause slight changes in the volume of your residual limb, therefore some amputees choose to remove their prosthesis to avoid any discomfort. If you choose to remove your prosthesis, it is advised that if worn, to keep your sock on as this will aid in donning your prosthesis at the end of the flight.

Developing and maintaining good habits



Losing a limb/s will impact the balance of your body. Whether you are an upper or lower limb amputee, practising good posture, and if you are using a prosthesis, a good gait (walking) pattern, will assist you with your balance from early on. Your physiotherapist will help you to develop these skills.

Your socket

The prosthetic socket is the device that joins your residual limb to the prosthesis.

For a prosthesis to work well it is important that the socket is a 'good' fit. In fact, it is hard to think of anything else you might wear that has to fit as well, and for as long, as the socket of a prosthesis. This is due to the fact that our bodies and residual limbs are living things which are constantly changing in size and shape. Your prosthesis, however, is an object which is fixed in size and shape.

Lower limb amputees

If you are a lower limb non-prosthetic user it is important that the seating and back support on your wheelchair provides and promotes a good sitting posture. The seating/cushion needs to be comfortable and give you suitable pressure relief to prevent skin problems. You should also be aware of the impact that the use of assistive devices such as walking frames, crutches and walking sticks can have on the rest of your body; especially the arms, hands, shoulders and upper back area.

For people with a single-side amputation, it will be normal to put more stress through the nonamputated side of your body, especially in the early stages following amputation. People often do this to make up for their missing limb and more so when they start prosthetic training. This can be due to the lack of confidence and inexperience using a prosthesis. This additional stress can lead to long term health problems and can sometimes cause unnecessary pain.

Where possible, it is necessary to make sure that you practice the good habits that you have been taught by your healthcare team. This includes being mindful of good gait patterns, and developing the strength in the legs and trunk (stomach and back) muscles to assist with walking. This will support your ability to do everyday activities and help to prevent injuries.

Upper limb amputees

People living with upper limb amputations (whether they are using a prosthesis or not), need to take care of their neck, upper back and shoulder areas to prevent long term pain. Flexibility of the neck and upper back, along with neck and shoulder blade control exercises will be very important in the long term.



The socket is made just for you, according to the condition and shape of the residual limb. When prosthetic sockets are fitted, your prosthetist may choose to make what is called a 'check (test) socket' first; a clear see-through socket which enables the prosthetist to see any pressure areas or redness. A 'check socket' can easily be changed (modified) to suit your shape, wearability, and comfort if required. That way, when the final socket is made the fit should be more comfortable for you.

It is not unusual for sockets to feel strange at first - keep in mind that a movable body part is being housed in a hard shell. Adjusting to taking pressure through a different surface of your body when standing and walking, for example the shin bone and back of the lower leg instead of the sole of the foot (for a below knee amputee), may take some time to get used to.

For lower limb amputees, the prosthetic socket usually consists of a liner or prosthetic sock, and a weight-bearing (hard) outer wall which forms the connection to other components such as knee joints and prosthetic feet. Similarly, the socket for upper limb amputees forms a connection to other components such as elbow and wrist joints or hands. The liner or prosthetic sock helps to protect the skin inside the hard shell of the socket. The liner works to minimise friction and rubbing between skin and the socket.

The importance of a good socket fit

A poorly fitting socket in lower limb amputees can:

- Cause skin breakdowns or blisters and ulcers
- Affect your ability to walk well
- Impact your balance
- Contribute to falls
- Be uncomfortable and painful to wear

A poorly fitting socket in upper limb amputees can:

- Cause skin breakdowns and irritations
- Impact your ability to successfully use the prosthesis
- Be uncomfortable and painful to wear

So, how do you manage to keep a good fit between something that changes (your body) and something that doesn't (your socket)?



Managing change

There are so many different types of prostheses and people are all individual. The best way to deal with change is to be aware of your own body and its responses, be informed on how your prosthesis should work, and contact your doctor or prosthetist if you ever have a question.

In time, you should have a fairly good idea how your prosthesis should look and how it should feel when it is fitting properly. If you are unsure then talk to your prosthetist and ask them to explain it to you. You should learn to be familiar with how your residual limb looks so you can notice any changes in appearance or skin markings.

You do it in two ways. Firstly, by trying to minimise changes in your residual limb - this includes maintaining your diet and regular exercise. And secondly, by constantly reviewing how you feel in your prosthesis, checking the skin and contacting your prosthetist if you notice a change - see page 2 for Centre contact details.

Some people's residual limbs don't change. They wear the same limb and suspension system day in day out without any problems, while others will need to make several adjustments over the course of the day. Speak to your prosthetist about problem solving ideas which may be helpful for you.



TIP: If you are unsure how to explain a skin problem or red mark to your prosthetist – why not take a photo on your phone. A photo will help you to explain the problem when you see your clinician at your next appointment.

Managing your weight is an important part of keeping healthy and active.

Due to the reduced levels of activity, weight issues can be a problem for people with lower limb amputations. Try different forms of exercise and stay as fit as you can, whilst keeping your diet healthy. A healthy body will assist your overall condition - mentally, physically and emotionally. People with diabetes should speak to their dietician.

If you gain weight, your residual limb is likely to get bigger and your socket may become too tight. If you lose weight, your residual limb will get smaller and your prosthesis may become too loose. Generally changes of more than 23 kilograms will show up in an altered socket fit, so try to maintain an even body weight.

Residual limb changes can happen for other health related reasons. For example: anything that affects the fluid balance of the body can affect your residual limb size. Kidney or heart conditions can cause this, as can some medications, particularly those which cause fluid loss. Other causes of changes in residual limb size include weather (especially extreme heat), menstrual cycles, alcohol intake, activity and air travel.

If you have a large gain, or loss in weight or a significant change in activity it is your responsibility to let your prosthetist know, so they can ensure the safety of your prosthesis. Prosthetics come in many shapes and sizes. You and your prosthetist will work together to choose the best prosthesis for you.

The type of prosthesis you have will depend on such things as:

- Your general level of mobility
- The condition of your residual limb
- Your weight
- The types of activities you do
- Your ability to look after yourself and manage your healthcare
- How comfortable you are with new ideas
- Any other health issues.

Prosthetic components have weight limits and recommendations based on mobility. Underestimating weight or activity levels could result in a prosthesis that is not strong enough to let you be active safely and this can be dangerous.

Prostheses classification

If you are a lower limb amputee sometimes prostheses, or the components of a prosthesis, are referred to by their 'K' classification. This is simply a measure of activity, for example:

- **K1**, Suitable for use on level surfaces at steady speeds. That is someone who only walks indoors and short distances outdoors for example to the car.
- **K2**, Suitable for outdoor use but at a low activity level. For example, someone who manages steps and slopes but walks limited distances and may use a stick or other gait aid.
- **K3**, Suitable for general outdoor use, but not including sports and other high impact activities. For example, someone who walks in most commonly encountered environments, at varying speeds, long distances when required and usually without a gait aid.
- **K4**, Suitable for high impact use. For those people who have unrestricted mobility and may impose higher than usual forces on their prosthesis, e.g. sports, manual work.

Componentry manufacturers often rate their components according to these classes or mobility grades. This is why your prosthetist will ask you about your activities, so they can choose componentry that is safe and effective for your lifestyle.

Regardless of your level of amputation, if you are going to use a prosthesis you need to use it regularly to maintain your skills.

Using a prosthetic limb takes a large amount of energy because you have to compensate for the loss of bone and muscle of the amputated limb. A person fitted with an above-knee prosthesis may need to use up to sixty percent more energy to walk. For this reason some people choose not to use a functional prosthesis. If this is the case the option of a 'cosmetic only' prosthesis could be the best choice.

People with upper limb amputations may decide not to use a prosthesis at all and/or may only wear a prosthetic arm for certain activities such as: work around the home, riding a bike or doing a particular activity.

Looking after your prosthesis

Like anything which is used a lot, your prosthesis will suffer wear and tear. Repairs and adjustments are an unavoidable part of an amputee's life. These can usually be arranged directly with your prosthetist. Do NOT attempt your own adjustments. You can easily make the problem worse.

If you inadvertently get saltwater or similar on your waterproof prosthesis, rinse it off with plenty of freshwater as soon as you can and dry it off. If you can't remove the cover to do this then take it to your prosthetist as soon as possible. Certain components are particularly vulnerable to sand and salt damage.

Also remember that your prosthesis will be made with a particular weight limit in mind. If you are going to do heavy lifting or much more vigorous activity than normal, check that your prosthesis will be able to handle it.

Proper terminology after an amputation

- **Residual limb** Historically, the limb that has been amputated was previously called a "stump." However this term is not the most attractive term to use, and many people who have had an amputation feel that this term is insensitive, so there is a more appropriate term: residual limb. The term residual limb refers to the part of the body that remains after an amputation has been performed. For example, if you have had a lower extremity amputation above the knee, the part of your thigh that remains after the amputation is called the residual limb.
- **Contralateral** adjective; on the opposite side.
- Prosthesis your artificial limb.
- Suspension the method of holding your prosthesis on.
- Alignment the method of setting up your prosthesis.
- Cosmesis the soft foam covering your prosthesis.
- Compression an aid to compress the residual limb to aid the reduction of swelling, for example the use of Juzo socks post-surgery.
- Liner an item used to line the socket.
- Sleeve can be used as a method of suspension, worn on the residual limb beneath the socket.
- Socket the device that joins your residual limb to the prosthesis.
- Components the hardware that is used below the socket.
- Lamination this is the top coating of the socket that gives its finish.

Caring for your residual limb

Taking care of your residual limb is extremely important. You need to get into a regular routine and check your limb on a daily basis, including when you experience any pain, or changes in the way the prosthesis fits.

The skin around your residual limb will always be fragile and it needs to be looked after. Managing and looking after your skin care will help to prevent any problems in the future. You should report any changes to your skin to your doctor or prosthetist immediately.



Consider the following suggestions:

- Use a hand mirror to check the back of your residual limb for changes before you put your prosthesis on.
- Check your residual limb for markings or changes when you take your prosthesis off.
- Check for skin breaks, ulcers, dryness or cracking. Any noticeable signs of change should be immediately seen to by your doctor.
- Ingrown hairs can pose a problem for some amputees. It is recommended that you do not shave or wax your residual limb.
- Your residual limb should be washed thoroughly everyday.

Most people experience changes in the size and shape of their residual limb from day to day, or over a long period. You are responsible for keeping an eye on how well your prosthesis fits each day, and adjusting your prosthetic sock regime to suit. If changing socks does not help, you will need to contact your prosthetist.

Moisturise your residual limb every night to keep the skin supple and strong. Dry skin is more easily cracked and is less able to tolerate the pressures of a prosthesis. Do not moisturise before putting on your prosthesis, it's best to moisturise at night as this allows the cream to be absorbed by the skin, not your prosthetic sock.

Never ignore an itch, it is always best to remove the prothesis and check your residual limb for marks or blisters etc.

If you have an urgent issue relating to your residual limb organise a review with your GP or local emergency department immediately. If it is a persistent issue that could be related to your prosthesis, a review with your prosthetist would be beneficial.

Swimming

You must not swim or shower with your prosthesis on unless you have been prescribed one for that particular activity. If your prosthesis accidentally gets wet, you should aim to dry it out as much as you can and book an appointment as soon as possible with your Clinical Technician to have the internal components checked for water damage.

Travelling to the RNOH Rehabilitation department



By tube

The nearest tube stations to the RNOH Stanmore are:

Edgware (Northern Line)

Catch the 107 bus from Edgware Bus Station, located outside the tube station, to the hospital Gates. Allow 10 minutes to get from the bus stop to where you need to be in the hospital.

Stanmore (Jubilee Line)

Take the free RNOH courtesy vehicle from the taxi rank outside the tube station. Please note this service can only accommodate collapsible wheelchairs.

RNOH to Stanmore courtesy car service runs Monday to Friday. First Service from RNOH to Stanmore: 06:00hrs Last Service from RNOH to Stanmore: 20:45hrs Frequency: Every 15 minutes

Please Note:

- Cars pick up and drop off from Bus Stop A at Stanmore station.
- There is no service on Saturday or Sunday.
- This service does not currently accommodate children under the age of 4 years old as the cars do not carry car seats, only booster seats.
- Staff, please be courteous and give consideration to patients when boarding.
- When on site, cars pick up and drop off at Orthotics, Outpatients Department and Main Gate only.
- Assistance dogs are welcome.

Alternatively the RNOH is a 30 minute uphill walk, or taxi ride (taxis are available outside the tube station).



By train / bus

Elstree and Borehamwood Station (Thameslink)

Lift access is available on station platforms. Catch the 107 bus towards Edgware. Once you have arrived at the Hospital Gates, allow 10 minutes to get from the bus stop to where you need to be in the hospital.

New route for 615 bus

The 615 bus that runs to Hatfield has changed its route. After stopping at Stanmore Station, it now goes to the hospital via Stanmore Hill and Wood Lane, with new stops close to the Aspire entrance. The UniBus Co have increased the service to run approximately every 30 minutes from 7am to 10pm Monday to Friday with a reduced service on Saturdays. Please note: the bus service does not take Oyster cards as this is not a TfL bus.



Patient buggy service on-site

There is an onsite patient buggy service that can shuttle patients between main locations on site. The buggy can be requested from Main Gate, Outpatients, the Prosthetics and Orthotics reception. It will also stop in the

lower patient car park.

(Please note: The buggies cannot transport wheelchairs and can only take passengers able to step on the buggy unaided.)

Buggy Timetable:

- 09:30 16:00 Monday to Friday* *Depending on volunteer availability.
- If you wish to find out more about the buggy service, please contact Volunteer Services via email: rnoh.volunteering@nhs.net or by calling: 020 8909 5394.

Free WiFi for RNOH patients and visitors



The RNOH are pleased to announce the launch of our free WiFi service: **RNOH-FREE-WIFI**. This service is available across the RNOH Stanmore site for patients and visitors, and will soon be made available at the Bolsover Street site.

How do I connect to the WiFi service?

To use the service please follow the instructions below:

- 1. On your device connect to the RNOH-FREE-WIFI network
- 2. A log on page will appear. Click "Sign up for a Free Account"
- 3. Enter your first name, surname and email address and click "Register"
- 4. Click "Sign On" to gain access

Who do I contact if I have any problems with the service?

This WiFi service is provided free of charge and therefore with limited support. The IM&T Service Desk will provide support on a best endeavours basis to patients and visitors. If any issues are encountered, please contact the IM&T Service Desk on 020 8909 5719.

Listen to Radio Brockley for free via RNOH-FREE-WIFI.



Amending your appointment

If you find that you will not be able to attend your alloted time slot, please contact the relevant department as soon as possible to change or cancel your appointment, this way the time can be offered to another patient.

ASPIRE leisure centre

The ASPIRE leisure centre is located on site and hosts first-class facilities for able-bodied and disabled people, including a pool with slope and water wheelchairs. Inpatients at the RNOH are welcome to use the facilities free of charge.

After discharge, patients who are registered disabled can receive both reduced membership tariffs and reduced admission prices.

To find out more about Aspire please contact: Aspire National Training Centre, Wood Lane, Stanmore, HA7 4AP

Tel: 020 8954 5759 Email: reception@aspire.org.uk Website: www.aspireleisurecentre.org.uk

Charity No. 1075317

Feedback

Here at the RNOH Prosthetic Rehabilitation Centre, it is our aim to provide the highest standard of care and see our patients in a timely manner. However if you feel that we have not met your expectations, you can speak to the Patient and Liason Service (PALS).

Alternatively, feel free to fill in a Friends and Family Questionnaire available from reception, or ask a member of staff for one.

PALS contact details





rnoh.pals@nhs.net

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