

SCHEDULE 2 – THE SERVICES

Service Specifications

Service Specification No.	D01/S/d
Service	Complex Disability Equipment – Prosthetic Specialised Services for People of All Ages with Limb Loss
Commissioner Lead	Carolyn Young
Provider Lead	
Period	12 months
Date of Review	

1. Population Needs

1.1 National/local context and evidence base

This specification will benefit the patient by improving health and well-being outcomes for persons of all ages with limb loss and any related condition(s) by offering personalised care, whilst supporting, facilitating and enabling patient choice and by putting them first. This will also support equity, equality and ease of access to the highest quality services. A prosthesis is an artificial device designed to emulate where possible a missing body part like a limb. Prosthetic rehabilitation is the clinical practice to use prostheses and appliances to restore function in people with limb loss following amputations or congenital limb deficiencies.

Limb loss and any related co-morbidities are life-long conditions and it is recognised that limb loss can be managed effectively through specialised rehabilitation services. This service specification places the patient at the heart of everything specialised rehabilitation service centres do. It focuses on maximising their independence, achievement of their individual goals and improving their quality of life. This service specification empowers and liberates clinicians to innovate, with the freedom to focus on improving healthcare services.

This service specification also honours the Cross Government guarantee to our Armed Forces, Veterans and their Families, as set out with the Murrison Report – A Better Deal for Military Amputees and so relates to the provision of enhanced prosthetic services to Veterans. This should also offer a benefit to all NHS patients with limb loss in the wider NHS. (**Appendix 1**).

The implementation and delivery of this service specification will reward quality, efficiency, innovation, best practice and support patient choice. It will also encourage the effective and efficient use of vital resources.

The total number of patients with an amputation or congenital limb deficiency attending specialist rehabilitation service centres in the UK is estimated at 55,000 - 60,000.

The rehabilitation and re-ablement of all patients is provided by a specialised Multi-Disciplinary Team (MDT) (**Appendix 2**) which should be consultant led. The needs of patients of all age groups are addressed including physical, psychological, social, emotional and spiritual with the emphasis on individual outcomes, independence and prevention keeping patients dexterous, mobile and safe. Secondary injuries should be minimised.

This specification recognises and supports NHS England's duty to reduce health inequalities in access to health services and health outcomes achieved as enshrined in the Health and Social Care Act 2012. It is committed to ensuring equality of access and non-discrimination, irrespective of age, gender, disability (including learning disability), gender reassignment, marriage and civil partnership, pregnancy and

maternity, race, religion or belief, gender or sexual orientation. In carrying out its functions, NHS England and its service and equipment providers will have due regard to the different needs of protected equality groups, in line with the Equality Act 2010. This document is compliant with the NHS Constitution and the Human Rights Act 1998. This applies to all activities.

This specification should be read in conjunction with National Statutory Requirements in relation to the supply of Services and Equipment by the NHS in England.

Advances in Technology: Evidence Base for Clinical Use

It is generally accepted that the evidence base for prosthetics services is limited due to low numbers of participants and difficulties with conducting randomised controlled trials.

Other relevant documents are included but are not limited to those shown in **Appendix 3**.

2. Outcomes

Service Provider Outcomes

All patients offered rehabilitation and re-ablement services

- Improved access, including flexible out of hours appointments if required, to all members of the MDT as required by the patient
- All persons with limb loss should have lifelong access to the service(s) and be offered an MDT review at least every 24 months.
- Improved individual outcomes related to patient centred service: informed patient choice
- Increased patient satisfaction
- Maintenance appointments as indicated by the prosthetics component manufacturers

Key Outcome Measurements

These will include where appropriate but are not limited to:

Impairment Measures:

- McGill Pain Scores which are well recognised for description of pain
- Numeral Rating Score or Visual Analogue Score for Pain which are widely used for scoring pain
- Socket Comfort Score is a validated numerical measure for comfort of prosthetic socket fit
- Stump Descriptors (e.g. ISO). These are the recognised descriptors for various levels of upper and lower limb amputations and congenital limb deficiencies

Mobility Disability/Activity Measures:

- Special Interest Group in Amputee Medicine Mobility (SIGAM) Grades. This is a recently validated disability measure for mobility and the measure recommended by the British Society of Rehabilitation Medicine (BSRM) for routine clinical practice. It is also validated for self-completion by the patient and for use over the telephone
- Locomotor Capabilities Index 5 (LCI-5). The LCI-5 is a 14 item sub scale within the Prosthetic Profile of the Amputee Questionnaire (PPA) scored according to whether an individual can perform a particular activity while wearing a prosthesis
- Timed Walking Tests. A simple objective measure that appears to correlate well to functional mobility in amputees
- Timed Up and Go. An objective measure that is a simple, quick test of basic functional mobility. It helps to assess balance and risk of falling and provides an objective means of following functional change over time
- Video recording of gait while performing tasks relevant to the agreed goals as a means to assess Gait Quality
- Canadian Occupational Performance Measure (COPM). A client centred tool which measures patient satisfaction with their occupational performance and enables the patient and Occupational Therapist to set achievable rehabilitation goals

Participation:

- Assessment of mutually agreed personalised care plans

- EuroQoL - 5D, a Quality of Life Questionnaire that provides a simple descriptive profile and a single index value for health status
- Trinity Amputation and Prosthetic Scales (TAPES) is a multi- dimensional self-report instrument to better understand the experience of amputation and adjustment to a prosthesis and may be applied as a clinical and research tool where appropriate

Emotional:

- Hospital Anxiety and Depression Scale (HADS) or
- General Health Questionnaire (SF-12 Health Survey is a short and easily completed document that uses a small number of questions to measure functional health and well-being from the patient's point of view)

The above should be used where clinically appropriate, or where they have been previously used as an outcome measurement tool for individual patients to ensure consistency.

2.1 NHS Outcomes Framework Domains & Indicators - See Appendix 6

Limb Loss Service Specific Outcome Measures:

Domain 1	Preventing people from dying prematurely	X
Domain 2	Enhancing quality of life for people with long-term conditions	X
Domain 3	Helping people to recover from episodes of ill-health or following injury	X
Domain 4	Ensuring people have a positive experience of care	X
Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm	X

3. Scope

3.1 Aims and objectives of this limb deficient/limb loss patient service

Aims

The service aims to maximise the mobility, independence and quality of life of the individual, working in collaboration with the patient as equal partners.

This aim is achieved by the provision of prostheses (artificial limbs) through a dedicated and specialised multidisciplinary team (**Appendix 2**).

These specialised services seek to empower patients, provide them with information about their condition(s) and offer individual choice(s) about where, how and by whom they are to be treated and allow for a collaboratively agreed prescription(s) to be provided. The ability to return to normal life and work are key service outcomes thereby improving the individual's quality of life. The value of rehabilitation is highlighted by the fact that 66% of working age amputees return to employment and this is achieved by providing services that are focused on:

Person (Patient) Centred Service: Informed Patient Choice

- Patient Information Pack
- The patient or their advocates are provided access to all the information necessary to make informed and timely choices
- Collaboratively produced personalised care plans with the Patient/MDT including individual goal setting and improving and maintaining health and well-being
- The Patient working collaboratively with the MDT may exercise their patient choice to decide by whom they are seen and where they receive their treatment

Timing of Treatment

Appointments need to be agreed, flexible and include emergency appointments. There should be sufficient time allowed for clinicians to work with service users to achieve an optimal outcome at each appointment and over time.

The dynamic nature of rehabilitation means that as the patients goals change so does the rehabilitation and re-ablement programme.

Areas of Focus in order to Maximise Independence:

Education and Advice

- Pre-Amputation Consultation
- Advice to Surgical and Referring Teams
- Congenital Limb Deficiency including Antenatal
- Specialist education and general advice related to prosthetics and co-morbidities

Mobility and Stability

- Provision of appropriate artificial limbs (prosthetic limbs)
- Provision of enhanced prostheses to veterans including spare limbs as set out in **Appendix 1**
- Provision of appropriate specialised mobility training e.g. prosthetic rehabilitation and gait re-education with specialised physiotherapists and or wheelchair training with specialised therapists
- Provision of orthotics if linked to limb loss
- Liaison with and shared care with community services e.g. physiotherapy, occupational therapy, orthotics and social services

Activities of Daily Living

- Washing & dressing, food preparation and consumption, personal hygiene
- Provision of lower limb (leg) artificial limbs for mobility
- Provision of upper limb (arm/hand) artificial limbs for carrying out activities

Occupational/Vocational Management

- Assisting patients back to work or education
- Assisting patients in work to stay in work or education
- Support with maintaining and or improving existing levels of fitness

Recreation

- Prosthetic appliances and components to meet the clinical need(s) and rehabilitation goals of the individual e.g. terminal devices

Social and Psychological Wellbeing

- Counselling for any person with limb loss including management of Post-Traumatic Stress Disorder
- Provision of appropriate non weight bearing cosmetic limbs for use in a wheelchair
- Provision of a patient acceptable cosmetic finish taking account of the custom made silicone covers for prosthetic limbs and partial hand prosthesis policy where appropriate

Objectives

The core objectives include the active participation of the individual, returning the post amputation individual to their pre-amputation activity levels wherever possible, to decrease reliance on carers and or social services and to aim for maximising mobility, independence, inclusion and participation in society. This is achieved through pro-active multidisciplinary rehabilitation, regular review and patient and clinician education.

For patients with congenital limb deficiency the aim is to improve mobility and function from birth to a level that maximises mobility, independence, inclusion and participation in society. This is achieved by

supporting the patient and family, consultations including antenatal where appropriate, functional assessment, prescription of prostheses, surgical intervention when appropriate and lifelong follow-up (cradle to grave).

Patients of all ages accessing prosthetics services either have acquired limb loss or are individuals with congenital limb deficiency. Generally these individuals have more than one condition or complex needs, which are often in combination. NB: Complex will be determined as part of the MDT assessment.

The conditions this patient group encompass include co-morbidities such as diabetes, cardio-vascular disease, neurological and musculoskeletal conditions.

The service objectives include giving opinions and advice and training to other relevant specialties, such as general practitioners, surgeons, paediatricians and acute trust therapists, on matters relating to amputation and limb deficiencies.

3.2 Service Description/Care Pathway

Service Delivery

The service is expected to be provided through a National Network of Specialist Rehabilitation Service Centres to maximise highest quality of informed patient choice of service and provider encouraging innovation.

For military veterans in England the service aims to provide prosthetics, orthotics and associated services to meet the needs of veterans who have a service attributable injury (**Appendix 1**).

Key Priorities

The Service should be provided in specially designed and adapted facilities to meet the needs of patients with limb deficiency and limb loss.

The Service should have separate paediatric facilities and be responsive to the special needs of children with limb deficiency and limb loss (also see **Appendix 4**).

Each service should have in place an appointment system that allows for the allocation of sufficient time for the treatment of each user of the Service. All users attending the service should be allocated dedicated time with each appropriate member of the multi-disciplinary team, as required for that episode of care.

The Service Provider should be able to demonstrate on-going monitoring and review of:

- Effectiveness
 - the use of preventative best practices
 - enhancing the quality of life for the patients with limb deficiency and or limb loss
 - helping people to recover from episodes of ill health or following injury
- Patient Experience with the service
 - patient waiting times for appointments
 - outcome measures (in alphabetical order) including but not exclusively the following areas:
 - achievement of agreed rehabilitation goals
 - emotional issues including body image and prosthesis appearance issues
 - mobility and activity levels
 - positive experience of care
 - socket fit and comfort
- Complaints and plaudits (patients must have access to the NHS complaints procedure)
- Adverse incidents, accidents, near miss and never events

The Service Provider must ensure that patients' Privacy and Dignity is maintained and that Equality and

Diversity is observed at all times. It should be able to respond to requests for a patient's partner or carer to accompany them during their treatment and to requests for treatment by staff of the same gender where possible. Facilities must include the opportunity for patients to be treated in single treatment rooms when requested.

The Service Provider must supply suitable transport services for patients who are unable to make their own way to appointments due to medical reasons and should be able to demonstrate that the use of this service is monitored. Service providers must provide an appropriate number of disabled parking spaces close to the Centre to facilitate ease of access for patients.

The Service Provider must have or be able to demonstrate that they are working towards an integrated IT system which enables them to store and manage information and run operational systems. There should be evidence that the service provider is working towards electronic clinical records which will be maintained throughout the patient's contact with the service. Patients should be able to request access to information on all aspects of their care.

The Service Provider must be able to demonstrate that:

- Patients receive the most appropriate treatment to meet their needs
- Records are kept of audit activity in relation to clinical effectiveness
- All clinicians and healthcare professionals participate effectively in Clinical Governance/Audit and that they comply fully with Information Governance requirements
- Professional registration is routinely monitored
- They wholly support Continuing Professional Development, Research & Development and other education and mandatory training
- Patients and or Patient Stakeholders, User Groups and or Support Groups are involved in local service design and delivery

Amputee and limb loss rehabilitation service centres provide a range of services in order to deliver the outcomes highlighted and referred to in the Key Service Outcomes to Patients and Service Users Section. These include:

- Information for patients and carers
- Consultant led prosthetic and rehabilitation services that will offer support to other non-consultant-led service centres when required
- Specialised assessment and review
- Prescription, provision and maintenance of individualised prosthetic limbs including partial limbs whether upper or lower limbs or both
- Prescription of silicone cosmeses
- Specialised gait re-education
- Functional rehabilitation and education
- Pain management
- Psychological support
- Educational, vocational, leisure, mobility and driving advice

The service will be provided by a specialised multi-disciplinary rehabilitation team (**Appendix 2**) with training in the field of prosthetic rehabilitation.

When treating children, the service will additionally follow the standards and criteria outlined in the Specification for Children's Services (**Appendix 4**).

The service will provide the appropriate level of support for education and workforce development for the current and trainee workforce by:

- Enabling support for the future workforce through provision of sufficient high quality practice placements and learning environment
- Provision of preceptorship for newly qualified staff
- The workforce must be continually developed to enable contemporary practice, through systematic education and learning

- Promotion of widening access to education
- Provision of and/or access to mandatory training
- Promoting ethnicity and diversity in the workforce
- Enabling research and development and innovation
- Promoting educational governance, thus recognising the importance and value of education
- Supporting staff health and wellbeing
- Meeting workforce assurance requirements

The team will work in close liaison taking an interdisciplinary and holistic approach to individual patient outcomes. The service will be able to demonstrate how the specialised service interacts and liaises with local and community services to ensure patients receive the most appropriate care in the most appropriate location.

The team will develop close links with referring services, e.g. vascular surgery, orthopaedic surgery, plastic surgery, diabetic teams, paediatric teams, diagnostic imaging, obstetric and General Practice services. These form the entry point into the amputee and congenital limb deficiency service and are critical for optimal patient outcomes.

Preoperative consultation wherever possible with the consultant in rehabilitation medicine, senior prosthetist, specialist physiotherapist and occupational therapist is advisable to secure the best outcomes for the patient.

Care Pathway

Congenital limb absence or defects – this occurs when a portion or the entire upper or lower limb fails to form completely when the baby is developing in the uterus. The common congenital limb loss or limb defects can include but are not limited to:

- complete or partial absence of the limb (such as fibula hemimelia or congenital absence of the tibia)
- failure of the portion of the limb to separate (commonly seen in fingers or toes)
- duplication (commonly seen as extra fingers or toes)
- overgrowth (the limb is much larger than the normal limb)
- undergrowth (the limb is much smaller than the normal limb)

Consultation with the appropriate members of the MDT will be offered to parents on identification of an unborn or new-born child with congenital limb absence or defects.

Pre-amputation - Consultation will be arranged with appropriate members of the specialist rehabilitation service centre's multidisciplinary team. This is also applicable and will be offered to parents on identification of an unborn child with congenital limb absence

A Rehabilitation and re-ablement programme will commence pre-operatively if possible.

Primary patients - New patients with limb loss, including military personnel leaving the Defence Medical Rehabilitation Programme, will have appropriate access to all the disciplines available to the service as well as community and other services in their own locality.

The rehabilitation and re-ablement phase 'Patient' - This phase covers three main clinical situations where intensive rehabilitation is required:

1. New amputation surgery having been carried out:

- Patient undergoing an amputation for the first time on that limb(s)
- Revision of amputation to a higher level e.g. transtibial converted to transfemoral
- Revision and or reconstruction to the residual limb
- Referral into the service of a child or adult with congenital limb absence or defects

2. Patient with limb loss returning to the service:

- Patients who for whatever reason (e.g. bio psychosocial) were unable to participate in their original post-amputation rehabilitation
 - Patients medical status changes
3. Patients with limb loss transferring into a service from other NHS areas, or from the DMRP or from other qualifying countries:
- Full assessments should be undertaken and carried out by the Consultant/MDT
 - Limb provision may be inadequate or a prosthesis may not have previously been supplied

See **Appendix 5** for the Patient Pathway: Rehabilitation Phase.

Established Patients with Limb Loss - These patients have undergone a period of rehabilitation and re-ablement following congenital loss or amputation and achieved their maximum potential in terms of mobility, independence and participation. They will normally require input from part of the team in order to review and maintain their prosthetic provision but will not always require on-going medical monitoring or therapy.

The Established Patient 'User' - This phase starts when the first phase finishes when the patient meets the following criteria:

- The patient has been medically assessed and treatment provided with successful and stable outcome e.g. residual limb wound healed or phantom limb pain being managed
- The patient has been discharged from the initial episode of physiotherapy e.g. patients gait, mobility and function is optimised
- Agreed patient and multi-disciplinary team goals have been achieved
- The patient does not need any specialised amputee occupational therapy e.g. patient satisfied that they have achieved their optimal functional potential
- Primary limb is delivered and deemed 'fit for purpose, fits and is comfortable' by the patient and the specialised multi-disciplinary team
- Communication with the GP to state the patient has graduated to level of 'established user'

This 'User' phase allows for

- The on-going review of the patient/user, which is required because patients with prostheses may need socket adjustments, a different type of prosthesis to facilitate a new activity, monitoring of the sound limb or treatment for pain or other complications
- Children and young adults to be offered a review a minimum of twice a year. Consideration should be given to the rate of child development and the need for prompt and frequent delivery of prostheses. Associated waiting and response times should be prioritised accordingly.
- Established users to be able to bring their limbs back for preventive maintenance by individual arrangement dependent upon manufacturer's warranty, patient use or no later than 24 months
- Full access to the medical assessment e.g. assessments for medical issues such as sores, infections, swelling, bursa formation, sinus formation, veracious hyperplasia
- Full access to explore and assess for a prosthetic change as required e.g. sockets and suspension and component changes frequently, when the patient enters the established phase and can lead to significant increases in component cost
- Full access to therapeutic intervention e.g. provision of a different knee unit frequently requires prosthetic rehabilitation and gait re-education and provision of a different hand or elbow unit frequently requires occupational therapy intervention

Changing needs - Children, young adults, veterans and other patients require a flexible model of care which provides longer term involvement with the full MDT. This specification recognises that child growth is a recognised clinical need.

Non Prosthetic Limb Users – These patients will be encouraged to access the service at any time for advice, support and therapeutic intervention as required.

Communication

Service Providers should be actively involved in the on-going development of service delivery in collaboration with User Groups, Support Groups, Independent Providers, Professional Bodies and appropriate Charities.

The Service Provider should be able to demonstrate that patients have access to the following information at the Centre:

- Information about the Centre and the services provided including opening times, contact details and access
- Contact details of the named clinicians involved in their care
- Details of Patient User Groups, Patient Support Groups and or Support Systems, National Charities and Organisations in relation to limb deficiency and or limb loss

Resources

Services are provided through a national interactive network of Specialist Rehabilitation Service Centres, which allow and provide for the specialist range of rehabilitation skills and resources necessary to ensure ease of access to all aspects of service and equipment provision required by patient choice. These services will be delivered through a model which provides for increased specialisation and sustainability of service provision, thereby ensuring that the multi-professional team has the range and level of skills to deal with all complex cases. Centres should encourage innovation at all levels.

All patients should be provided with ease of access to the full range of services and specialist medical and rehabilitation skills, no matter which centre they may attend. Increased and improved collaboration is a prerequisite to service delivery to ensure accessibility for all. The service provided to all users will be accessible and available to all irrespective of their geographical location, ability to travel and any service and or equipment prescription(s).

Prosthetic and related Technical Services may be provided by appropriate providers contracted to the NHS, who need to be seen and practice as equal members of the Multi-Disciplinary Team and thereby be expected to support and sustain its high standards and foster collaboratively innovations both in technologies and in systems.

The Centres are described as follows:

N.B. It is important to note, that these descriptions DO NOT reflect the quality, standard of service or equipment to be provided to the patient, but are ONLY used to reflect the range of services made available at the centre so described.

1. Tertiary Centre

A Centre of expertise for ALL levels of amputation and limb loss (including upper limb, congenital and multiple limb loss), which is able to provide the full range of advice and prosthetic rehabilitation for all levels of upper and lower limb loss including paediatric services.

The multidisciplinary team (**Appendix 2**) must be led by a suitably experienced consultant in rehabilitation medicine who specialises in prosthetics and whose job is predominantly prosthetics, involving minimum of 5 or more weekly sessions in amputee rehabilitation. These centres should have access to socket manufacture and limb assembly on-site.

It is necessary to have close links and access to psychologist and counselling services, podiatry and orthotic services, or preferably to have them as part of the team. MDT members must have specialist experience and the appropriate training in the management of children with acquired or congenital limb loss, upper limb prosthetics and amputees with complex needs and or those requiring high specification, technologically advanced components. The centre should have access to inpatient rehabilitation beds for complex cases.

All services providing paediatric services are required to provide appropriate separate facilities.

The centres should hold combined clinics in conjunction with appropriate specialists, including but not limited to, Surgeons and Paediatricians etc. for:

- Congenital limb deficiency
- Pain management
- Limb Surgery including revision and reconstruction

Tertiary centres must be further developed to ensure specialist expertise in the future, both for rare and expensive conditions and for innovation, research and development. These centres also play a key co-ordinating and educating role whilst supporting standard centres ensuring high quality standards are maintained.

2. Standard Centre

These centres have a smaller multidisciplinary team and should have close links and access to a tertiary centre. The team should include an experienced rehabilitation consultant or other suitably qualified medical practitioner, prosthetists and specialist therapists. Other expertise including medical, psychological and engineering input can be provided through local services or a tertiary centre. These centres will provide all standard lower limb services and should have established links and referral pathways with a tertiary centre for complex cases and additional services.

Some standard upper limb amputees and congenital limb deficient patients may be managed provided there are appropriately trained and experienced staff. The standard centre will deliver the core services for most patients in the relevant local area with some expected variations depending upon local agreements. These centres should have the ability to respond, assess and where technically feasible deliver on the same day access to socket manufacture and limb assembly on-site.

3. Satellite

These centres have a smaller multidisciplinary team and should be affiliated to a tertiary or standard centre. The team includes experienced prosthetists and therapists. Other expertise including medical, psychological and engineering input can be provided through the affiliated tertiary or standard centre. These centres should have access to workshop facilities for minor adjustments and repairs.

NB: A Visiting Clinic is where a specialist team from a tertiary or standard centre visits an acute setting, to assess patients with limb loss together with the acute team and take over their rehabilitation programme. They generally do not have any access to workshop facilities.

Service Centre designation as Tertiary, Standard or Satellite will be reviewed by NHS England as part of the contracting process.

3.3 Population covered

The service outlined in this specification is for patients ordinarily resident in England*; or otherwise the commissioning responsibility of the NHS in England (as defined in Who Pays?: Establishing the responsible commissioner and other Department of Health guidance relating to patients entitled to NHS care or exempt from charges).

*NOTE: for the purposes of commissioning health services, this EXCLUDES patients who, whilst resident in England, are registered with a General Practitioner (GP) Practice in Wales, Scotland or Northern Ireland but INCLUDES patients resident in Wales, Scotland or Northern Ireland who are registered with a GP Practice in England.

This specification also relates to military veterans ordinarily resident in England. NOTE: It does not cover veterans in Scotland, Northern Ireland or Wales within which authorities are making their own arrangements for implementation of “*A better deal for military amputees*”. Nor does it apply to crown dependencies such as the Isle of Man or the Channel Islands. A veteran is defined as any member of the armed forces who has served for one day or more with injuries that must be service attributable (Appendix 1).

Discharge planning

These patient groups have lifelong conditions and therefore have lifelong access to specialist service centres.

3.4 Any acceptance and exclusion criteria and thresholds

When treating children, the service will additionally follow the standards and criteria outlined in the Specification for Children's Services in **Appendix 4**.

For all eligible patients there are no exclusions to access of the service and clinical assessment.

All veterans will continue to have access to high quality prosthetics based on clinical need and as set out in the prescription guidelines in **Appendix 1**.

National policies' are being developed to support this service specification and include but are not limited to:

- Microprocessor Controlled Prosthetic Knees
- Custom Made Silicone Covers for Prosthetic Limbs and Partial Hand Prosthesis
- Multi-Grip Upper Limb Prostheses

3.5 Related Interdependencies with other services/providers

The prosthetics service will have a relationship with the following:

- The prosthetics learning and development network
- The regional vascular network (including MDT)
- The orthopaedic departments of referring hospital
- Regional pain management services
- Regional plastic surgery services
- Diabetic Units
- Paediatric Units – in hospital (including neo-natal units) and community
- Trauma Network
- Other complex rehabilitation services
- Primary & Secondary Care Services
- Special Educational Needs Co-ordinators
- Defence Medical Rehabilitation Programme
- Civilian Limb Loss Charities e.g. Limbless Association, STEPS and Reach
- Patient User and Support Groups
- Military Charities e.g. British Limbless Ex-Service Men's Association (BLESMA), Armed Forces Networks and Help for Heroes

4. Applicable Service Standards

4.1 Core Requirements

Core Requirement 1 - The provider can demonstrate the prosthetics service is provided by a specialised multi-disciplinary amputee rehabilitation team with training in the field of prosthetic rehabilitation appropriate to the level of service, which include the following:

- access to a consultant in rehabilitation medicine with a special interest in amputee rehabilitation
- MDT to include from the following: prosthetists; occupational therapists; physiotherapists; podiatrists; orthotists; clinical nurse specialists; dieticians; psychologists; counsellors; prosthetic technicians; rehabilitation engineers; healthcare assistants; social workers; clinical and administrative support staff and peer group volunteers.

Core Requirement 2 - The provider can demonstrate the prosthetics service has full access to a medical assessment e.g. assessments for medical issues such as sore, infections, swelling, bursa formation, sinus formation, veracious hyperplasia.

Core Requirement 3 - The provider can demonstrate the prosthetics service has full access to therapeutic intervention e.g. provision of a different knee unit frequently requires gait re-education and provision of a different hand or elbow unit frequently requires occupational therapy intervention

Core Requirement 4 - The provider can demonstrate the prosthetics service is provided in specially designed and adapted facilities to meet the needs of prosthetic patient. The Service has appropriate paediatric facilities and be responsive to the special needs of children with limb deficiency and limb loss.

Core Requirement 5 - The Service Provider can demonstrate that patients have access to the following information at the Centre:

- Information about the Centre and the services provided including opening times, contact details and access.
- Contact details of the named clinicians involved in their care.
- Details of Patient User Groups, Patient support systems, National Charities and Organisations in relation to limb loss

4.2 Applicable national standards e.g. NICE

To protect and promote the best interests of the patient, it is vital that all service providers comply with all Clinical Governance applicable national standards, which include but are not limited to:

All Service Centres must be in receipt of, or be able to evidence working towards, third party accreditation in respect of quality, service delivery and customer service standards e.g. ISO 9001-2008 & Customer Service Excellence.

The Service Provider must ensure that policies are in place to cover all aspects of Health and Safety and to demonstrate monitoring/action plans to resolve problems:

- Patient safety – Incident and accident reporting mechanisms and infection control
- Equipment Issues – Medicines and Healthcare Products Regulatory Agency reporting, reuse of components, Planned Preventative Maintenance

Service Providers must ensure that all Clinicians/Healthcare Professionals have:

- Annual performance reviews which should include appraisal of performance and objective setting
- Annual Development Plans to enable them to undertake any required training and to perform to their maximum potential
- Protected time for Continuing Professional Development, practice placement support and preceptorship for newly qualified staff
- To work to this specification and national supporting policies and any appropriate professional guidelines

In conjunction with this service specification Quality & Service should also take account of a provider's:

- Ability to meet/surpass this specification
- Capacity of service & confidence in ability to deliver quality outcomes
- Ability to provide adequate clinical and technical cover for patients
- Transition planning and sustainability
- Improvements in Patient Outcomes
- Quality, standards assurance, performance management, implementation
- Use of policies, guidance and user group views to shape services
- Experience & achievements, methods & tools
- Innovation & creativity

There is collective responsibility within the spirit co-production, participation and collaboration to improve and innovate service(s) locally, regionally and nationally.

National quality measures are being developed in Patient Related Outcome Measures (PROMS) and CQUINS and Quality Innovation Prevention and Productivity (QIPP). When available they should be used in conjunction with this specification.

Other relevant documents are included but are not limited to those shown in **Appendix 3**.

4.3 Applicable standards set out in Guidance and/or issued by a competent body (e.g. Royal Colleges)

Specific equipment is needed for the fabrication of full artificial limb sockets and the production of artificial limbs. Each patient is an individual and it should be the expertise of the skilled healthcare professional that determines any prescription. This is a specialist bespoke service that cannot be prescribed in advance.

Professional guidelines are included but not limited to those shown in **Appendix 3**.

5. Applicable quality requirements and CQUIN goals

5.1 Applicable quality requirements (See Appendix 6 Parts A-D)

5.2 Applicable CQUIN goals (See Appendix 6 Part E)

6. Location of Provider Premises that have been through the Formal Designation Process

Designated Provider's include but are not limited to premises located in the following areas:
Birmingham Community Healthcare NHS Trust; Royal Bournemouth & Christchurch Hospitals NHS Trust; Sussex Community NHS Trust; North Bristol NHS Trust; Cambridge University Hospitals NHS Foundation Trust; North Cumbria Acute Hospitals NHS Trust; South Tees Acute Hospitals NHS Trust; Colchester Hospitals University NHS Foundation Trust; South Derbyshire Acute Hospitals NHS Trust; Royal Devon & Exeter Healthcare NHS Trust; Kent and Medway NHS Social Care Partnership Trust; North East London NHS Foundation Trust; Hull and East Yorkshire Hospitals NHS Trust; Isle of Wight NHS trust; Leeds Teaching Hospitals NHS Trust; Leicester Specialist Mobility Centre; Aintree Hospitals NHS Trust; Hammersmith Hospitals NHS Trust; Guys and St Thomas' NHS Foundation Trust; St George's Healthcare NHS Trust; Royal National Orthopaedic Hospital; Luton & Dunstable NHS Foundation Trust; University Hospital of South NHS Foundation Trust; Newcastle upon Tyne Hospitals NHS Foundation Trust; Northampton General Hospital NHS Trust; Norfolk Community Health & Care NHS Trust; Nottingham University Hospitals NHS Trust; Oxford University Hospitals NHS Trust; Plymouth Community Healthcare NHS Trust; Portsmouth Hospital NHS Trust; Lancashire Teaching Hospitals NHS Foundation Trust; Sheffield Teaching Hospitals NHS Foundation Trust; Staffordshire and Stoke on Trent Partnership NHS Trust; Wirral University Teaching Hospital NHS Foundation Trust and The Royal Wolverhampton NHS Trust

7. Individual Service User Placement

Appendix 1 – Veteran Prosthetic Services

This appendix has been developed to support this specification in the commissioning of veterans' prosthetics services by NHS England and is focused on delivering the principal recommendation of the report "A better deal for military amputees", namely the delivery of nationally commissioned specialised prosthetics services for veterans.

In addition to the civilian numbers shown in the service specification, service centres will provide an enhanced service to veterans who have lost a limb in the service of their country.

New veterans will, generally speaking, be veterans of recent conflicts e.g. Iraq and Afghanistan. They have had prolonged periods of intensive intervention and rehabilitation at the Defence Medical Rehabilitation Centre Headley Court. So the purpose of this service for these veterans is to maintain the existing level of function. This will be achieved through maintenance of existing prostheses, replacement of these prostheses when required, upgrading of prosthetic components where appropriate, ensuring that excellent socket fit is achieved and maintained and regular MDT review to ensure optimum physical condition and independence as near to levels at discharge from Headley Court as possible. Other services e.g. psychological support may or may not be required, and this will need to be identified in the assessment and planning of individual's needs.

Both new and existing veterans of any conflict, who may well be established patients of an existing Tertiary, Standard or Satellite service centre (definitions of which are included within the specification), which may not be a centre with enhanced veteran care (EVC)¹, and who may be happy with their existing service, and may choose to continue to use that centre², transfer their care to another centre and or continue to use their existing service whilst accessing certain enhanced services e.g. MDT services, advanced socket technology, rapid access to pain management and psychology.

Serving personnel who have lost limbs will be reassured that should they leave the military that they will continue to receive high quality prosthetics and services in the NHS. Their amputation rehabilitation needs continue to be met and that independence gained during their rehabilitation at Defence Medical Rehabilitation Centre Headley Court continues.

Defence Rehabilitation Services

Eligible Service personnel leaving the armed forces who are making the transition into civilian life will be referred into NHS services through the Defence Medical Rehabilitation Programme.

The Defence Medical Rehabilitation Programme

All NHS prosthetics services will have some veteran patients. Some centres will have high densities of veterans because they are located close to areas where people settle after military service. Centres with higher densities of "post 9/11" veterans i.e. veterans of the conflicts in Iraq and Afghanistan, are required to have contacts with parts of the Defence Medical Rehabilitation Programme particularly Headley Court. The aim of the Defence Medical Rehabilitation Programme is to return those service personnel to operational levels of fitness as soon as possible – the "fitter quicker" principle – where this is not achievable the aim is to attain the maximal level of physical, psychological and social health. Enhanced prosthetics services for veterans in the NHS will be expected to achieve a similar aim.

Services for Military Veterans

¹ Centres with enhanced veteran care i.e. funding via the Murrison report funds will be called enhanced veteran care centres, within this operating model to differentiate them from tertiary and standard centres.

² Dr Daniel Poulter MP, Parliamentary Under Secretary of State for Health said that: "Veterans are free to choose the Centre from which they receive their care and NHS England will continue to agree funding requests for high specification prosthetics through the Veterans Prosthetics Panel regardless of which disablement service centre they attend." and "Veterans are free to choose which Centre they receive their care from and there is no requirement or expectation that any veteran will be asked to move to one of the nine centres."

Services for veterans will be incorporated within NHS prosthetic services and in complex cases are likely to take place in the EVC centres. All new veteran patients must be considered a primary referral for their first attendance.

Centres that provide services to veterans will have resources to support veterans as below:

- Identification of veterans
- Have a robust patient information management system
- Be able to identify veterans on this system
- Be able to identify if injuries are service attributable (for people injured after 2005 this is straightforward as Service Personnel and Veterans Agency have electronic records, before this the veterans' own records will need to be viewed by a clinician)
 - This information (and where possible a copy of the documentary evidence such as the War Pension letter or AFCS Award Notice) will need to be provided for each subsequent request for funding via the Veterans Prosthetics Panel. This information should therefore be recorded and maintained with the patient record.
- Be able to identify type of amputation, prosthetics, and history including socket types

Treatment of veterans:

- Centres will offer an upper and lower limb service to veterans
- All new veterans transitioning into the NHS from the Defence Medical Rehabilitation Programme should be seen at a tertiary centre by a consultant in rehabilitation medicine in the first instance, who will allocate their primary clinician subject to the veterans individual choices of centre, service provider and healthcare professional
- Subject to the veterans individual choices of centre, service provider and healthcare professional(s); veterans with complex stumps and/or multiple injuries should be managed at a tertiary centre by a consultant in rehabilitation medicine on an on-going basis, with full inputs from the Multi-Disciplinary Team where required. All veterans' will have an holistic assessment and treatment plan focusing on preservation of residual limb, excellent sockets, high quality prosthetics
- Any psychological health issues and any social issues should be assessed and identified and supported and treated accordingly
- All centres will have an identified pathway to an integrated wheelchair and special seating service, and orthotics provision
- There will be a clear pathway for veterans to access specialist pain management, and specialist plastic and vascular surgery
- Centres will offer enhanced prosthetics provision as outlined in the prescription guidelines shown below
- Intensive socket services e.g. multiple scans taken, multiple sockets developed until maximum comfort and utility is achieved
- Centres will offer advanced socket and scanning technology
- Centres will offer peer to peer and group support run by veterans for veterans
- Centres will offer access to or provision of specialist fitness, exercise and/or sports programmes for veterans

Support

Centres will offer access to a British Limbless Ex Service Men's Association support officer.

Outcomes data

Maintain or improve mobility, socket comfort, gait and satisfaction as measured by valid reliable, standardised outcome measures.

Relationships and transition

Tertiary services will link with standard and satellite centres and will offer consultation, advice and treatment to those veterans who choose not to use a tertiary centre on an on-going basis.

Tertiary centres will provide assertive in-reach to Defence Medical Rehabilitation Programme, particularly to Defence Medical Rehabilitation Centre Headley Court, to establish numbers of veterans likely to be medically discharged and likely dates. Tertiary centres will provide a 'Transition Service' in the assessment of all leaving service personnel and either retain them for treatment or refer them to an appropriate prosthetics centre. This will include ensuring that new veterans coming from the Defence Medical Rehabilitation Programme are normally identified 6 months prior to discharge.

Cost Data

Data collection on cost per case supplied to commissioners quarterly. Costs are broken down by each intervention and by each professional group to support the development of currencies.

Environment

The service will offer specialist veterans' clinics available outside normal working hours to ensure minimal disruption to working and home life, but to also ensure that other NHS patients are not disadvantaged.

Centres providing an enhanced service to veterans will be expected to demonstrate how they meet or exceed these standards. Services meeting most of the criteria will have access to the pool of "Murrison" funding available in 2012-15 to further enhance services.

Each centre will have a costed development plan showing the improvements to services for veterans that they wish to put in place over this period of time. All measures will be aggregated and Defence Medical Rehabilitation Centre and NHS Centres are required to liaise closely to ensure that they are aware of new veterans' making the transition to NHS services. This will be arranged well in advance of the discharge of the person concerned. An initial consultant-led MDT assessment will be carried out to ensure complete review on discharge from the armed forces. A joint document will be produced for the transfer of care.

Centres that wholly or substantially meet this service specification will offer enhanced services to veterans. These services will form a network of tertiary services across England. In addition to this, all enhanced services will support a number of standard and satellite centres in a "hub and spoke" model. This is to ensure that all existing veterans have access to specialist support and advanced socket technology should this be required. All centres will participate in a learning and development network that spans all prosthetic services, private sector providers (should they wish to participate) and the Defence Medical Rehabilitation Programme.

This specification also relates to military veterans ordinarily resident in England. It does not cover veterans in Scotland, Northern Ireland or Wales within which authorities are making their own arrangements for implementation of "A better deal for military amputees". Nor does it apply to crown dependencies such as the Isle of Man or the Channel Islands. A veteran is defined as any member of the armed forces who has served for one day or more.

Injuries must be service attributable.

Prosthetic devices for veterans are funded through the Veteran Prosthetic Panel. As part of the implementation of 'A better deal for military amputees' the Government has committed up to £15m over three years to fund prosthetics and to improve services for veterans. These prescription guidelines have been in use for veterans since April 2012 and are intended to reflect those used at Defence Medical Rehabilitation Programme Headley Court and to ensure that the commitment to a 'proper return for sacrifice' is met.

Prescription guidelines:

1. The veteran and their Multi-Disciplinary Team must demonstrate the benefit to the patient of any newly prescribed prosthetics. This will include evidence based measures of improved function, gait, mobility etc.
2. A trial period using a new prosthesis should be initiated
3. Provision of limbs will extend to:
 - a. Mobility and shower limbs including a spare that maintains function
 - b. Work related adaptations e.g. limbs with multiple grips
 - c. Basic recreation limbs for swimming or running
4. Funding will be available for the out of warranty maintenance of components provided by Headley Court as in 3 above
5. Updates and upgrades of components will also be funded. An update is a like-for- like replacement of a current component, and an upgrade would provide a component that offers increased functionality. Again, this is restricted to those categories mentioned above
6. High activity specialist or sporting limbs would not routinely be considered for funding, nor would funding provision be made for out of warranty maintenance of such specialist limbs
7. The following components would not routinely be considered:
 - a. Components not CE marked and passed standards for use in this country
 - b. High cost components
 - c. Components not routinely used in Headley Court
 - d. Components that are being used as part of a trial or to support a study.
8. Provision will be made for items that would provide ancillary mobility. Again benefit to the patient must be demonstrated via the application process and supported by evidence

Appendix 2 - Specialised Multi-Disciplinary Team

This team (with the possible exception of the dietician, podiatrist and social worker) would be based in the rehabilitation service centre and with in-reach to the wards, and is in no particular order.

Consultant in Rehabilitation Medicine (usually with a special interest in amputee rehabilitation)

The consultant should be responsible for the overall clinical care of the patient, although it is appropriate for other team members to lead on specific areas of care. In the current NHS structure, the consultant physician is generally considered to be the most appropriate team leader. The role of the Consultant in Rehabilitation Medicine is well described in the Royal College of Physicians' Report, Medical Rehabilitation for People with Physical and Complex Disabilities (2000) and the Clinical Governance Supplement of Clinical Rehabilitation. Supporting medical staff may include an Associate Specialised, Staff Grade doctor or a Clinical Assistant for service provision, and a Specialised Registrar in Rehabilitation Medicine undertaking training. The Consultant in Rehabilitation Medicine should have completed the accredited training for a Consultant in Rehabilitation Medicine (currently CCST in Rehabilitation Medicine includes 3 months mandatory training in Amputee Rehabilitation). However to specialise in this field will need an extra 12 months in the area. This equates to a total of 15 months full-time (3 months compulsory plus 12 months optional).

For an appointment at the nodal Referral specialised rehabilitation service centre the Consultant should have this extra training and experience particularly in the management of congenital limb deficiency, complex and multiple limb loss and more specialised prosthetic techniques.

Prosthetists

Prosthetists are all registered Allied Health Professionals with the Health and Care Professions Council and have undertaken degree education with a recognised UK or overseas University.

Prosthetists provide the best possible artificial limb for patients who have lost or were born without a limb. Prosthetists should be conversant with the guidelines published by the British Association of Prosthetists and Orthotists (BAPO, 2000) and available on their website (www.bapo.com). Within their HCPC registration all Prosthetist / Orthotists are able to assess, diagnose, and prescribe and provide appropriate prosthetic treatment.

Designated Prosthetists should manage or oversee the prosthetic care of patients with the rarer types of limb loss (e.g. congenital limb deficiency or upper or multiple limb loss) in order to develop and maintain the specialised experience necessary to meet the needs of these patients. This approach should be considered for all children and is supported by the Prosthetic Paediatric Consortium.

Prosthetic Technicians

Prosthetic technicians main role is to manufacture the various types of prosthetic devices (protheses) supplied by their specialist rehabilitation service centre. Prosthetics patients require protheses to replace missing limbs, or part of a limb in order to allow them to lead as independent a life as possible.

Technicians are supplied with a measurement sheet, body cast, body tracing or a job card by a prosthetist. The technician will then be required to use their skills to manufacture the required protheses, which can be manufactured using a wide range of materials, including plastics, metals, leather, carbon fibre, and composite materials. All of the protheses manufactured are bespoke - designed specifically for each patient. Frequently the technician will be involved in the design stage.

Physiotherapists

Specialist physiotherapists should be experienced in amputee management, including lower limb pre-prosthetic and prosthetic rehabilitation/gait re-education skills training, have a good understanding of prosthetics, be able to look after limb loss patients with complex problems, and be conversant with the evidence-based clinical guidelines produced by British Association of Chartered Physiotherapy in Amputee Rehabilitation (BACPAR). They should have skills in goal setting and use of outcome measures. They should be able to liaise with, advise and educate the physiotherapists and other multidisciplinary team members in the referring (acute) and rehabilitating hospitals. It is recommended

that at least one physiotherapist within each Centre⁸ has a relevant post-graduate accredited qualification in Amputee Rehabilitation and should be graded as a clinical specialist. In tertiary centres knowledge of paediatrics is recommended and experience of upper limb loss management and prosthetics is advantageous. N.B. Many centres utilise the specialist occupational therapy skills for upper limb patients.

Occupational Therapists

Occupational Therapists undertake prosthetic limb training for patients with upper limb amputation or congenital deficiency, including training in one-handed activities where relevant. They also undertake training for activities of daily living for both upper and lower limb amputees and arrange home or school visits in liaison with physiotherapists and community therapists. A suitably experienced occupational therapist should be a member of the core clinical team at all specialised rehabilitation service centres. Occupational Therapists should be conversant with the guidelines produced by the College of Occupational Therapists (Appendix 3) and be members of the Prosthetic Occupational Therapy (POT's) network.

Clinical Nurse Specialists

Clinical Nurse Specialists are nurses trained in the holistic care of amputees. They should have undertaken training in tissue viability and wound management and have a good understanding of prosthetics and Amputee Rehabilitation. Many will have undertaken counselling courses to enable them to assist patients to deal with the emotional effects of their amputation. The role of the CNS in rural areas incorporates the maintenance of close links between hospitals and the specialised rehabilitation service centres

Rehabilitation Engineers

A Rehabilitation Engineer should be available to advise on technical matters related to the quality, risk management, maintenance, assessment and prescription (e.g. gait analysis) procurement and disposal of prosthetic devices. Rehabilitation Engineers can be either Clinical Scientists or Clinical Technologists. The former are registered under the Health and Care Professions Council, the latter are registered on the Voluntary Register of Clinical Technologists, after completing training schemes with the Institute of Physics and Engineering in Medicine. Registrations are under review by the Academy of Healthcare Science.

Orthotists

Orthotists are all registered Allied Health Professionals with the Health and Care Professions Council and have undertaken accredited degree education with a recognised UK or overseas University.

Orthotists should be conversant with the guidelines published by the British Association of Prosthetists and Orthotists (BAPO, 2000) and available on their website (www.bapo.com). Within their HCPC registration they are qualified and able to assess, diagnose, prescribe, and provide appropriate orthotic treatment.

Assistant Practitioner

Assistant Practitioners act under the guidance of a qualified healthcare professional. The role can be very varied depending upon the area in which the person is employed.

Healthcare Assistants

Healthcare assistants act under the guidance of a qualified healthcare professional. The role can be very varied depending upon the area in which the person is employed. Their role includes: washing and dressing, feeding, helping people to mobilise, toileting, generally assisting with patients overall comfort, monitoring patients conditions by taking temperatures, pulse, respiration's and weight.

Podiatrists

A Podiatrist should be available, particularly to provide care for the remaining foot in unilateral lower limb diabetic or dysvascular amputees, or appropriate links with local podiatric services must be established.

Psychologists / Counsellors

A counselling service must be provided by Clinical counsellors who have experience of working in a Rehabilitation setting. Although basic counselling will indirectly be provided by many members of the specialised multi-disciplinary team, patients at all centres should have the option of seeing a qualified Clinical Counsellor. The counsellor should be available to see relatives or carers of the amputee.

A clinical Psychologist with experience in dealing with the particular problems of patients with physical disabilities should be readily available to see selected patients.

Dieticians

Provides counselling regarding nutrition issues to improve health, aid in optimal weight maintenance and healthy living.

Social Worker

A hospital Social Worker/Care Manager should be available to establish the appropriate links with Social Services; identify any continuing health care needs, give advice regarding benefits and other financial matters, and to be involved with plans for discharge from the acute hospital.

Peer Group Volunteers

Are available on part-time basis to talk to patients (who are interested) and help patients.

Appendix 3 – Relevant Documents

Government

- National Service Framework for long-term conditions (2005)
- Dr Andrew Murrison MD, MP 'A Better Deal for Military Amputees', 2011
- Department of Health (2010), Equity and excellence: Liberating the NHS: section 3 Putting the patients and the public first, Department of Health, London
- Audit Commission (2000), Fully equipped; The provision of equipment to older or disabled people by the NHS and social services in England and Wales, London <http://archive.audit-commission.gov.uk/auditcommission/nationalstudies/health/socialcare/pages/fullyequipped.aspx.html>
- Audit Commission (2002), Fully equipped: Assisting independence, London <http://archive.audit-commission.gov.uk/auditcommission/nationalstudies/health/socialcare/pages/fullyequipped2002.aspx.html>
- Audit Commission (2004), Guidance on the commissioning of prosthetics services, London, <http://archive.audit-commission.gov.uk/auditcommission/SiteCollectionDocuments/AuditCommissionReports/NationalStudies/olderpeopleprosthetics.pdf>

NICE

- NICE Guidelines: Prevention of Cardiovascular disease (June 2010)
- NICE Guidelines: Physical Activity Guidelines in the UK (May 2010)
- NICE Guidelines: Promoting Physical Activity for Children and Young People (Jan 2009)

Multi-Disciplinary Team

- Commissioning For Patients: Guidance on National Commissioning of Specialised Services for People of All Ages with Limb Loss (2011), National Patient and Professionals Stakeholders, London
- British Society of Rehabilitation Medicine (2003), Amputee and Prosthetic Rehabilitation – standards and guidelines (2nd edition) section 4.19, British Society of Rehabilitation Medicine, London
- National Prosthetic Centre Managers Group (2010), National Service Specification for Prosthetic and Amputee Rehabilitation Services, National Prosthetic Centre Managers Group, Preston
- Royal College of Physicians & British Society of Rehabilitation Medicine (2010), Medical rehabilitation in 2011 and beyond. A report of a working party (6.21), London
- British Association of Prosthetists and Orthotists (2005), Guidelines for best practice No 1: The Role of the Prosthetist/Orthotist (Issued 2000 and then re-issued in February 2005, British Association of Prosthetists and Orthotists, Paisley
- Clinical Guidelines for the Physiotherapy Management of Adults with Lower Limb Prosthesis – British Association of Chartered Physiotherapists in Amputee Rehabilitation Guidelines December 2012
- Occupational Therapy with People who have had lower limb amputations. Evidence based guidelines. College of Occupational Therapists (2011) College of Occupational Therapists Ltd. 106-114 Borough High St, London SE1 1LB www.cot.co.uk/sites/default/files/publications/public/Lower-Limb-Guidelines%5B1%5D.pdf
- Occupational Therapy with Adults who have had lower limb amputations. Fact sheet (2013) www.cot.co.uk/sites/default/files/commissioning_ot/public/Lower-Limb-Evidence-Fact-sheet.pdf
- Upper limb Prosthetic Rehabilitation – Guidance document. College of Occupational Therapists (2006) College of Occupational Therapists Ltd. 106-114 Borough High St, London SE1 1LB

Patient

- CES (2010), Patient-led Prosthetics Services Charter, emPOWER consortium of charities, London www.em-pow-er.org/resources/Prosthetics+Charter+emPOWER+v11+Jan+2013.pdf
- Gallop, S & McNeice, SR (2009), Pain Free Mobility and Dexterity with Pathfinder Prosthetists eBook, CES a division of limbPOWER a trading style of the emPOWER consortium of charities, London www.em-pow-er.org

er.org/resources/limbPOWER+eBook+01+Pain+Free+Mobility+and+Dexterity+with+Pathfinder+P
rofessionals.pdf

Appendix 4 – Children’s Services

Aims and objectives of service

This specification annex applies to all children’s services and outlines generic standards and outcomes that would be fundamental to all services.

The generic aspects of care:

- The Care of Children in Hospital (HSC 1998/238) requires that:
- Children are admitted to hospital only if the care they require cannot be as well provided at home, in a day clinic or on a day basis in hospital.
- Children requiring admission to hospital are provided with a high standard of medical, nursing and therapeutic care to facilitate speedy recovery and minimize complications and mortality.
- Families with children have easy access to hospital facilities for children without needing to travel significantly further than to other similar amenities.
- Children are discharged from hospital as soon as socially and clinically appropriate and full support provided for subsequent home or day care.
- Good child health care is shared with parents/carers and they are closely involved in the care of their children at all times unless, exceptionally, this is not in the best interest of the child. Accommodation is provided for them to remain with their children overnight if they so wish.

Service description/care pathway

All paediatric specialised services have a component of primary, secondary, tertiary and even quaternary elements.

The efficient and effective delivery of services requires children to receive their care as close to home as possible dependent on the phase of their disease.

Services should therefore be organised and delivered through “integrated pathways of care” (National Service Framework for children, young people and maternity services (Department of Health & Department for Education and Skills, London 2004)

Interdependencies with other services

All services will comply with Commissioning Safe and Sustainable Specialised Paediatric Services: A Framework of Critical Inter-Dependencies – Department of Health

Imaging

All services will be supported by a 3 tier imaging network (‘Delivering quality imaging services for children’ Department of Health 13732 March2010). Within the network:

Procedure can be performed and reported at each site

- Robust procedures will be in place for image transfer for review by a specialist radiologist, these will be supported by appropriate contractual and information governance arrangements.
- Robust arrangements will be in place for patient transfer

- It will be clearly defined which imaging test or interventional complex imaging or intervention is required
- Common standards, protocols and governance procedures will exist throughout the network
- All radiologists and radiographers will have appropriate training, supervision and access to continuing professional development (CPD)
- All equipment will be optimised for paediatric use and use specific paediatric software

Specialist Paediatric Anaesthesia

Wherever and whenever children undergo anaesthesia and surgery, their particular needs must be recognised and they should be managed in separate facilities, and looked after by staff with appropriate experience and training. All UK anaesthetists undergo training which provides them with the competencies to care for older babies and children with relatively straightforward surgical conditions and without major co- morbidity. However those working in specialist centres must have undergone additional (specialist) training² and should maintain the competencies so acquired³ *. These competencies include the care of very young/premature babies, the care of babies and children undergoing complex surgery and/or those with major/complex co- morbidity (including those already requiring intensive care support).

As well as providing an essential co-dependent service for surgery, specialist anaesthesia and sedation services may be required to facilitate radiological procedures and interventions (for example MRI scans and percutaneous nephrostomy) and medical interventions (for example joint injection and intrathecal chemotherapy), and for assistance with vascular access in babies and children with complex needs such as intravenous feeding.

Specialist acute pain services for babies and children are organised within existing departments of paediatric anaesthesia and include the provision of agreed (hospital wide) guidance for acute pain, the safe administration of complex analgesia regimes including epidural analgesia, and the daily input of specialist anaesthetists and acute pain nurses with expertise in paediatrics.

*The Safe and Sustainable reviews of paediatric cardiac and neuro- sciences in England have noted the need for additional training and maintenance of competencies by specialist anaesthetists in both fields of practice.

References

1. Guidelines for the Provision of Anaesthetic Services (GPAS) Paediatric anaesthetic services. Royal College of Anaesthetists (RCoA) 2010 www.rcoa.ac.uk
2. Certificate of Completion of Training (CCT) in Anaesthesia 2010
3. CPD matrix level 3

Specialised Child and Adolescent Mental Health Services (CAMHS)

The age profile of children and young people admitted to specialised CAMHS day/in- patient settings is different to the age profile for paediatric units in that it is predominantly adolescents who are admitted to specialised CAMHS in-patient settings, including over-16s. The average length of stay is longer for admissions to mental health units. Children and young people in specialised CAMHS day/in- patient settings generally participate in a structured programme of education and therapeutic activities during their admission.

Taking account of the differences in patient profiles the principles and standards set out in this specification apply with modifications to the recommendations regarding the following:

- Facilities and environment – essential Quality Network for In-patient CAMHS (QNIC) standards should apply (<http://www.rcpsych.ac.uk/quality/quality,accreditationaudit/qnic1.aspx>)
- Staffing profiles and training - essential QNIC standards should apply.
- The child/ young person's family are allowed to visit at any time of day taking account of the child / young persons need to participate in therapeutic activities and education as well as any safeguarding concerns.
- Children and young people are offered appropriate education from the point of admission.
- Parents/carers are involved in the child/young persons care except where this is not in the best interests of the child / young person and in the case of young people who have the capacity to make their own decisions is subject to their consent.
- Parents/carers who wish to stay overnight are provided with accessible accommodation unless there are safeguarding concerns or this is not in the best interests of the child/ young person.

Applicable national standards e.g. NICE, Royal College

Children and young people must receive care, treatment and support by staff registered by the Nursing and Midwifery Council on the parts of their register that permits a nurse to work with children (Outcome 14h Essential Standards of Quality and Safety, Care Quality Commission, London 2010)

- There must be at least two Registered Children's Nurses (RCNs) on duty 24 hours a day in all hospital children's departments and wards.
- There must be an Registered Children's Nurse available 24 hours a day to advise on the nursing of children in other departments (this post is included in the staff establishment of 2RCNs in total)

Accommodation, facilities and staffing must be appropriate to the needs of children and separate from those provided for adults. All facilities for children and young people must comply with the Hospital Build Notes HBN 23 Hospital Accommodation for Children and Young People NHS Estates, The Stationary Office 2004.

All staff who work with children and young people must be appropriately trained to provide care, treatment and support for children, including Children's Workforce Development Council Induction standards (Outcome 14b Essential Standards of Quality and Safety, Care Quality Commission, London 2010).

Each hospital who admits inpatients must have appropriate medical cover at all times taking account of guidance from relevant expert or professional bodies (National Minimum Standards for Providers of Independent Healthcare, Department of Health, London 2002). "Facing the Future" Standards, Royal College of Paediatrics and Child Health.

Staff must carry out sufficient levels of activity to maintain their competence in caring for children and young people, including in relation to specific anaesthetic and surgical procedures for children, taking account of guidance from relevant expert or professional bodies (Outcome 14g Essential Standards of Quality and Safety, Care Quality Commission, London 2010).

Providers must have systems in place to gain and review consent from people who use services, and act on them (Outcome 2a Essential Standards of Quality and Safety, Care Quality Commission, London 2010). These must include specific arrangements for seeking valid consent from children while respecting their human rights and confidentiality and ensure that where the person using the service lacks capacity, best interest meetings are held with people who know and understand the person using the service. Staff should be able to show that they know how to take appropriate consent from children, young people and those with learning disabilities (Outcome 2b) (Seeking Consent: working with children Department of Health, London 2001).

Children and young people must only receive a service from a provider who takes steps to prevent abuse and does not tolerate any abusive practice should it occur (Outcome 7 Essential Standards of Quality and Safety, Care Quality Commission, London 2010 defines the standards and evidence required from providers in this regard). Providers minimise the risk and likelihood of abuse occurring by:

- Ensuring that staff and people who use services understand the aspects of the safeguarding processes that are relevant to them.
- Ensuring that staff understand the signs of abuse and raise this with the right person when those signs are noticed.
- Ensuring that people who use services are aware of how to raise concerns of abuse.
- Having effective means to monitor and review incidents, concerns and complaints that have the potential to become an abuse or safeguarding concern.
- Having effective means of receiving and acting upon feedback from people who use services and any other person.
- Taking action immediately to ensure that any abuse identified is stopped
- and suspected abuse is addressed by:
 - having clear procedures followed in practice, monitored and reviewed that take account of relevant legislation and guidance for the management of alleged abuse
 - separating the alleged abuser from the person who uses services and others who may be at risk or managing the risk by removing the opportunity for abuse to occur, where this is within the control of the provider
 - reporting the alleged abuse to the appropriate authority
 - reviewing the person's plan of care to ensure that they are properly supported following the alleged abuse incident.
- Using information from safeguarding concerns to identify non-compliance, or any risk of non-compliance, with the regulations and to decide what will be done to return to compliance.
- Working collaboratively with other services, teams, individuals and agencies in relation to all safeguarding matters and has safeguarding policies that link with local authority policies.
- Participates in local safeguarding children boards where required and understand their responsibilities and the responsibilities of others in line with the Children Act 2004.
- Having clear procedures followed in practice, monitored and reviewed in place about the use of restraint and safeguarding.
- Taking into account relevant guidance set out in the Care Quality
- Commission's Schedule of Applicable Publications

- Ensuring that those working with children must wait for a full CRB disclosure before starting work.
- Training and supervising staff in safeguarding to ensure they can demonstrate the competences listed in Outcome 7E of the Essential Standards of Quality and Safety, Care Quality Commission, London 2010

All children and young people who use services must be:

- Fully informed of their care, treatment and support.
- Able to take part in decision making to the fullest extent that is possible.
- Asked if they agree for their parents or guardians to be involved in decisions they need to make.
- (Outcome 4I Essential Standards of Quality and Safety, Care Quality Commission, London 2010)

Key Service Outcomes

Evidence is increasing that implementation of the national Quality Criteria for Young People Friendly Services (Department of Health, London 2011) have the potential to greatly improve patient experience, leading to better health outcomes for young people and increasing socially responsible life-long use of the NHS. Implementation is also expected to contribute to improvements in health inequalities and public health outcomes e.g. reduced teenage pregnancy and Sexually Transmitted Infections (STIs), and increased smoking cessation. All providers delivering services to young people should be implementing the good practice guidance which delivers compliance with the quality criteria.

Poorly planned transition from young people's to adult-oriented health services can be associated with increased risk of non-adherence to treatment and loss to follow-up, which can have serious consequences. There are measurable adverse consequences in terms of morbidity and mortality as well as in social and educational outcomes. When children and young people who use paediatric services are moving to access adult services (for example, during transition for those with long term conditions), these should be organised so that:

- All those involved in the care, treatment and support cooperate with the planning and provision to ensure that the services provided continue to be appropriate to the age and needs of the person who uses services.

The National Minimum Standards for Providers of Independent Healthcare, (Department of Health, London 2002) require the following standards:

- A16.1 Children are seen in a separate out-patient area, or where the hospital does not have a separate outpatient area for children, they are seen promptly.
- A16.3 Toys and/or books suitable to the child's age are provided.
- A16.8 There are segregated areas for the reception of children and adolescents into theatre and for recovery, to screen the children and adolescents from adult Patients; the segregated areas contain all necessary equipment for the care of children.
- A16.9 A parent is to be actively encouraged to stay at all times, with accommodation made available for the adult in the child's room or close by.
- A16.10 The child's family is allowed to visit him/her at any time of the day, except where safeguarding procedures do not allow this

- A16.13 When a child is in hospital for more than five days, play is managed and supervised by a qualified Hospital Play Specialist.
- A16.14 Children are required to receive education when in hospital for more than five days; the Local Education Authority has an obligation to meet this need and are contacted if necessary.
- A18.10 There are written procedures for the assessment of pain in children and the provision of appropriate control.

All hospital settings should meet the Standards for the Care of Critically Ill Children (Paediatric Intensive Care Society, London 2010). These require:

- A choice of suitable and nutritious food and hydration, sufficient quantities to meet service users' needs;
- Food and hydration that meet any reasonable requirements arising from a service user's religious or cultural background
- Support, where necessary, for the purposes of enabling service users to eat and drink sufficient amounts for their needs.
- For the purposes of this regulation, "food and hydration" includes, where applicable, parenteral nutrition and the administration of dietary supplements where prescribed.
- Providers must have access to facilities for infant feeding, including facilities to support breastfeeding (Outcome 5E, of the Essential Standards of Quality and Safety, Care Quality Commission, London 2010)

All paediatric patients should have access to appropriately trained paediatric trained dieticians, physiotherapists, occupational therapists, speech and language therapy, psychology, social work and CAMHS services within nationally defined access standards.

All children and young people should have access to a professional who can undertake an assessment using the Common Assessment Framework and access support from social care, housing, education and other agencies as appropriate.

All registered providers must ensure safe use and management of medicines, by means of the making of appropriate arrangements for the obtaining, recording, handling, using, safe keeping, dispensing, safe administration and disposal of medicines (Outcome 9 Essential Standards of Quality and Safety, Care Quality Commission, London 2010). For children, these should include specific arrangements that:

- Ensure the medicines given are appropriate and person-centred by taking account of their age, weight and any learning disability
- Ensure that staff handling medicines have the competency and skills needed for children and young people's medicine management
- Ensure that wherever possible, age specific information is available for people about the medicines they are taking, including the risks, including information about the use of unlicensed medicine in paediatrics

Many children with long term illnesses have a learning or physical disability. Providers should ensure that:

- They are supported to have a health action plan

- Facilities meet the appropriate requirements of the Disability Discrimination Act 1995
- They meet the standards set out in Transition: getting it right for young people. Improving the transition of young people with long-term conditions from children's to adult health services. Department of Health, 2006, London.

Appendix 5 - PATIENT PATHWAY: REHABILITATION PHASE

The following represent the pathways of referrals to the service. The most common form of referral is from the vascular surgeons, but this also carries for orthopaedic and plastic surgeons.

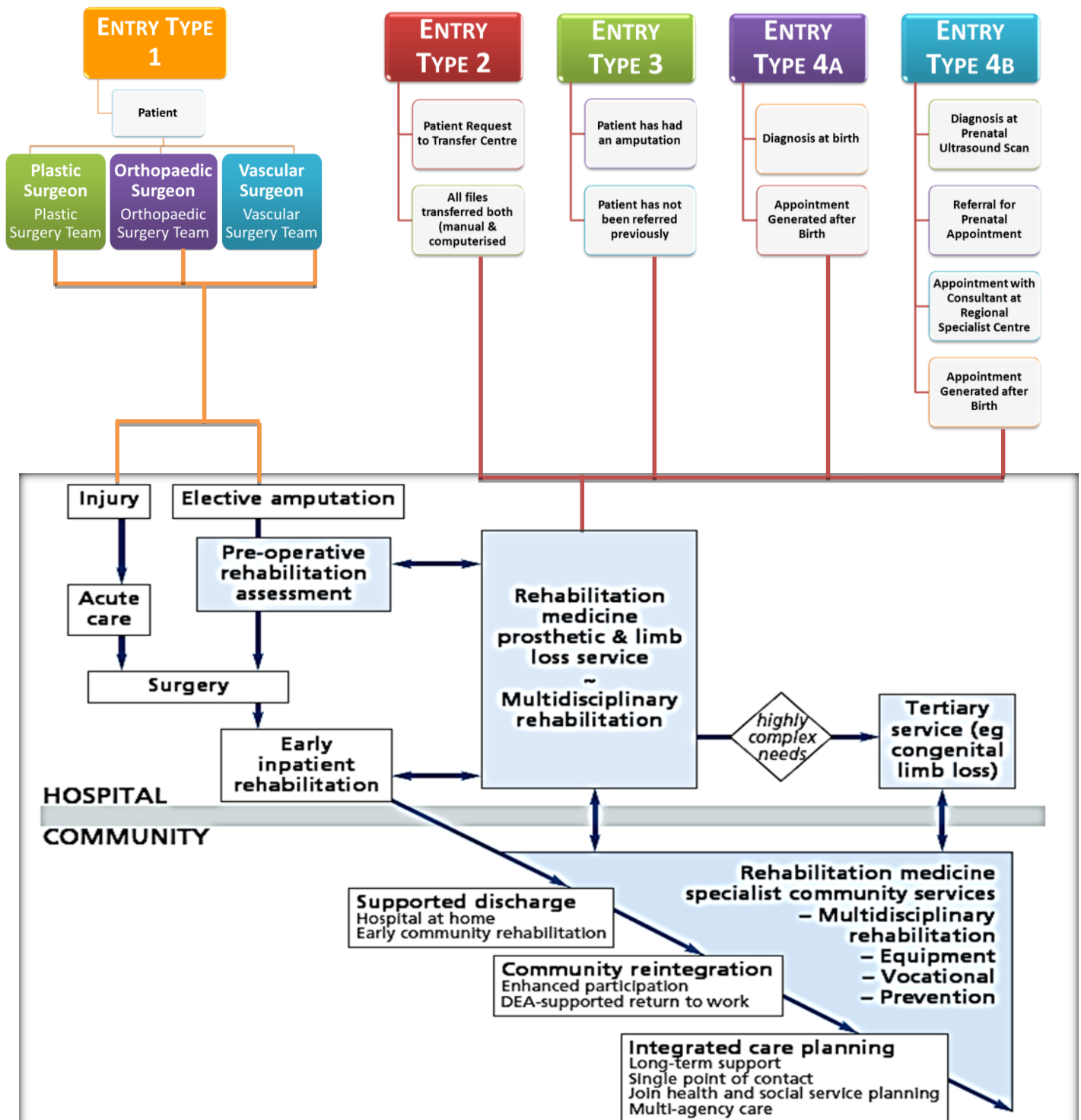


Fig 3.7 Clinical pathways for limb loss rehabilitation.

NOTE: This does not reflect the service for veterans

Appendix 6 - Quality standards specific to the service using the following template:

It is the intention in the future that patients would be able to access details and performance data of Quality Standards contained within this template or otherwise for their service provider.

Quality Requirement	Threshold	Method of Measurement	Consequence of breach
Domain 1: Preventing people dying prematurely			
Maintaining and or improving existing levels of fitness	To be agreed with service provider	SIGAM & K levels Outcome measures	Noncompliance with contract
Diabetes Management including residual limb care and prevalence of further amputations	To be agreed with service provider	Patient review and Audit of numbers of surgical residual limb revisions and any further amputations	Noncompliance with contract
Domain 2: Enhancing the quality of life of people with long-term conditions			
Achievement of agreed individual patient goals	To be agreed with service provider	EuroQol-5D Outcome Measure	Noncompliance with contract
Agree collaboratively Personalised Care Plans with the Patient	To be agreed with service provider	Care Plan Audit	Noncompliance with contract
Promoting Physical Activity	To be agreed with service provider	SIGAM & K levels Outcome measures & Patient Questionnaire	Noncompliance with contract
Domain 3: Helping people to recover from episodes of ill-health or following injury			
Agree collaboratively Personalised Care and Recovery Plans with the Patient	To be agreed with service provider	SF12 Health Survey	Noncompliance with contract
Domain 4: Ensuring that people have a positive experience of care			
Customer Service Excellence Award	To be agreed with service provider	Annual review of award & Patient satisfaction survey	Noncompliance with contract
Local Patient Satisfaction Survey	To be agreed with service provider	Local or Nationally designed questionnaire delivered through a variety of mediums	Noncompliance with contract
Domain 5: Treating and caring for people in a safe environment and protecting them from avoidable harm			
ISO 9001-2008 accreditation	To be achieved and maintained no later than 12 months from contract	Annual Audit	Noncompliance with contract
Completion of IR1s and	To be agreed with	Monthly Audits and Action Plans	Noncompliance with contract

Risk Assessments	service provider		
------------------	------------------	--	--