

SPECIALISED SERVICES NATIONAL DEFINITIONS SET (3rd Edition)

Assessment and Provision of Equipment for People with Complex Physical Disabilities (all ages) - Definition no. 5

Preface

This definition is part of the third edition of the Specialised Services National Definitions Set (SSNDS) being produced over 2008/10. The SSNDS was last edited in 2002. During 2008/10 all of the definitions in the second edition of the SSNDS will be updated; in addition three new definitions will be added to the Set.

Each definition is drawn up by a process involving providers (clinicians, hospital managers, and information and coding staff), commissioners and patients' groups and is then endorsed wherever possible by relevant national organisations. Finally, when the definition has been signed off by the National Specialised Commissioning Group it is published on their website.

The purpose of a definition is to identify the activity that should be regarded as specialised and therefore within the remit of PCT collaborative commissioning. A service is specialised if the planning population (i.e. catchment area) for that service is greater than one million people. This means that a specialised service would not be provided by every hospital in England; generally, it would be provided by less than 50 hospitals.

The definitions are not prescribed service models nor do they set service standards. Where national standards for a specialised service already exist, these may be referred to in the definition.

Inclusion of a treatment or intervention in a definition should not be taken to mean that there is established evidence of clinical or cost effectiveness.

The production of the SSNDS is an iterative process. The content of individual definitions in the SSNDS will inevitably change over time as new healthcare services which are specialised are introduced into the NHS and other services, which were previously specialised, become commonplace and cease to be considered specialised.

Future editions of the SSNDS will become more refined as the classifications systems develop and become better able to categorise specialised service activity. The current classification systems used in the third edition are the International Classification of Diseases, version 10, and the OPCS Classification of Interventions and Procedures, version 4.

Comments and suggested improvements to the definitions are very welcome and can be sent to the National Specialised Commissioning Group. Contact details are available from the NSCG website: www.specialisedcommissioning.nhs.uk

1. Introduction

This definition describes services that provide bespoke/customised equipment to enable adults and children with profound physical disabilities to live as independently as possible in their community or residential environment.

This definition has been subdivided into five main service areas:

- amputee and limb deficiency services (including prosthetics) and complex orthotics services
- specialised wheelchair provision services (including complex postural seating/postural management systems and specialised powered wheelchair controls)
- communication aids services (excluding all forms of hearing aids and cochlear implants)
- environmental control services and other electronic assistive technology services
- specialised telecare services.

For all of the above services, it is the complexity and severity of the person's condition, and the expertise required to assess/support and provide/maintain equipment for each individual that defines a specialised equipment service as opposed to the nature of the equipment itself. However, currently there are no standard tools available to distinguish between specialised and non-specialised service activity.

Specialised equipment services are characterised by:

- the complexity of service user needs (complex physical/cognitive/language/sensory disability - often in combination)
- expert assessment
- user and carer training to maximise effectiveness and independence
- timely review and re-assessment for changing needs
- on-going, life-long maintenance/replacement and user support.

A hub and spoke model is an effective service delivery model for specialised equipment services with the hub playing a key co-ordinating and educating role whilst supporting the spokes ensuring high standards are maintained even when dealing with less complex cases. The critical mass of people dealt with by the hub ensures the multi-professional team has the range and level of skills to deal with complex cases.

There is a growing demand for integrated links between specialised equipment services to maximise effectiveness for each disabled person. Individually targeted assessments should make it possible to harness developments in electronic technology to link multiple control functions by a single system. There are also those who do not require such sophistication, but who will benefit from telecare or 'smart house' technology. Some assessments for environmental controls are likely to result in the provision of a solution including telecare components.

2. Rationale for the service being in the Specialised Services National Definitions Set

Services are regarded as specialised for one or more of the following reasons:

- specialised equipment service activity is both low volume and relatively high cost

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- maximum utilisation of scarce specialist expertise is achieved by concentrating staff resources in relatively few centres
- economies of scale are achieved by concentrating the equipment required for assessment, as well as any workshop facilities, in relatively few centres

3. Links to other services in the Specialised Services National Definitions Set

Definition No.6, Specialised spinal services (all ages)

Definition No.7, Specialised rehabilitation services for brain injury and complex disability (adult)

Definition No.8, Specialised neurosciences services (adult)

Definition No.23, Specialised services for children

4. Detailed description of specialised activity

4.1 Amputee and limb deficiency services and complex orthotics services

4.1.1. Amputee and Limb Deficiency services including prosthetics (artificial limbs)

All the amputee and limb deficiency services are specialised. Services provide life-long care to people with a congenital limb deficiency or who have had limb amputation/s. Pre-amputation, re-amputation and ante-natal consultations are also provided as required. The surgical episode is excluded from this definition but routine liaison with all referring surgical units is good practice.

Amputee and limb deficiency services provide:

- specialist assessment and review
- prescription, provision and maintenance of prosthetic limbs
- prescription of silicone cosmeses
- specialist gait re-education
- pain management and psychological support
- educational, vocational, leisure, mobility and driving advice.

The multi-disciplinary team includes a consultant in rehabilitation medicine (with a special interest in amputee rehabilitation), a senior prosthetist and other prosthetists, specialist therapists (physiotherapists and occupational therapists), specialist nurses, counsellors and engineering personnel. Close links with other services, e.g. vascular surgery, limb reconstruction surgery, paediatric surgery, etc. are critical for optimal outcomes. The specialist prosthetic centres in England are listed in Annex 1.

4.1.2. Complex orthotics services

The majority of orthoses are provided 'off the shelf' in hospitals, pharmacies and sports shops and can be considered low-cost, high volume, i.e. are not specialised services.

The key aspect of the specialised orthotics service is the provision of a multi-disciplinary assessment to achieve the correct prescription; it is the assessment which is complex, not necessarily the solution (i.e. a complex orthotic problem will not necessarily result in a high cost solution).

Cases that will require access to specialised orthotics services include:

- high cost/low volume upper and lower limb orthoses
- complex spinal bracing
- cases requiring access to developing techniques e.g. Dynamic Lycra Splinting (DLS)
- cases where a clinical risk is being taken and careful monitoring is needed, e.g. an orthosis with sensory impairment, spinal bracing in the presence of marked spasticity, an orthosis that locks an unstable knee risking the possibility of falls due to altered gait.
- cases where the assessment requires a multidisciplinary assessment e.g. Functional Electrical Simulation (FES), post-polio syndrome.

The above list is not exclusive

The multi-disciplinary team includes orthopaedic surgeons, consultants from the referring specialty, a senior orthotist and other orthotists, specialist therapists (physiotherapists or occupational therapists as appropriate), counsellors, rehabilitation engineers plus a video monitoring and clinical measurement facility.

4.2 Specialised wheelchair services (including complex postural seating and powered wheelchair controls)

The provision of unmodified wheelchairs is not a specialised service, nor is the addition of an ‘off the shelf’ cushion or backrest.

Generally the specialised service will prescribe individual or bespoke equipment, or a bespoke element e.g. moulded seat on a standardised base, tilting base, etc. However the specialised wheelchair service is identified by the complexity of the individual’s condition and not by specific pieces of equipment.

The specialised wheelchair service is required by a small percentage of wheelchair users (less than 5%) with the most profound disabilities who can only function adequately in a wheelchair with unique modifications and inserts. The assessment process requires greater knowledge and expertise than is available in most local wheelchair services. This specialised service would address postural needs (facilitating comfort and function) as well as mobility.

Specialised wheelchair services are required by people who meet the following criteria:

- individuals whose posture or mobility needs can only be met with a high level of specific design input resulting in unique prescriptions which may use combinations of bespoke and/or off the shelf components; consideration of static seating and 24-hour postural management systems may also be required to ensure optimal outcomes
- individuals whose posture and mobility needs may not be complex in their own right but nevertheless significantly impinge on the overall level of functional ability
- individuals who have the ability to control a powered wheelchair but are unable to use standard joystick controls
- individuals requiring multiple items of equipment integrated via the wheelchair control methods.

The specialist seating team includes medical personnel (usually a consultant in rehabilitation medicine), specialist therapists (physiotherapists and/or occupational therapists) and clinical scientists (ideally clinical engineers, supported by rehabilitation engineers, electronic engineers and rehabilitation technicians). The specialist team works closely with the individual, their families/carers, other medical and surgical teams, local therapy staff

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(including speech and language therapists) as well as staff from education /employment. The specialist team also liaises with sub-contractors if customised equipment is not made 'in house'.

4.3 Communication aids services (excluding all forms of hearing aids and cochlear implants)

Specialised hearing aid services and cochlear implant services are covered by Definition No. 32, Specialised Ear Services (all ages).

(Note: that some individuals have communication problems without associated complex physical difficulties e.g. non verbal clients with autism spectrum disorders. Although their needs may be less complex, these patients require a comprehensive assessment and a similar level of maintenance and support. Unless there are alternative services available, such patients may need to access the specialised communication aids service.)

Communication aids and speech aids assist people who have difficulty with speech and/or language or written communication. Communication aids are used instead of or as well as natural speech and may be used alongside speech aids. The speech aids normally provided by specialised communication aid services include personal speech amplifiers and other devices that modify the acoustics of naturally produced speech e.g. electronic artificial larynxes. Not all those with complex difficulties will require a high-tech solution and a low-tech speech aid may be more appropriate in some cases.

The specialised communication aids service includes expert assessment, followed by demonstration, trial and provision of appropriate electronic and non-electronic communication devices, i.e. augmentative and alternative communication systems (AAC), user training, equipment maintenance, on-going support and periodic review. Some communication aids service centres only offer assessment services with review and follow-up elements; the provision and maintenance of equipment is contracted out. Some centres specialise in working with problems of spoken communication, some with problems of written communication and some with both. A list of communication aid service centres is shown in Annex 2.

A specialised communication aids service team includes speech and language therapists working closely with colleagues from education (specialist teachers), occupational therapists and engineering (clinical scientists and clinical technologists).

Computer-based aids (as well as some commercially available dedicated communication aids) can be used to integrate communication and environmental controls and telecare systems.

4.4 Environmental control systems services and other electronic assistive technology services

Environmental control systems (ECS) enable people with profound physical disability to gain a degree of personal independence. Most people requiring ECS have significant upper limb impairments that mean they are unable to use standard controls, for example remote-control handsets or telephones.

ECS use electronics together with infra-red and/or FM radio technology to enable people to:

- control access to their homes

- summon help in an emergency
- make and receive telephone calls
- operate computers
- operate electrical appliances in home, school and workplace environments.

Although constructed in modular format, the systems are prescribed and assembled to meet individual need. A significant proportion of users make use of these technologies to provide safety and security, gain remunerative employment, maintain social contacts and access information and home shopping services.

Need and system configuration is assessed and delivered by the specialist ECS team which includes technical staff (clinical scientists and clinical technologists), specialist occupational therapists and medical personnel (most commonly rehabilitation medicine consultants).

The ECS team provide initial assessment, ongoing advice and technical support and also co-ordinate other medical, paramedical and technical inputs. The ECS team deal with various disabling conditions, utilising a range of various electronic/computer-based technologies. They ensure that the technologies have a common interface suited to the particular patient.

4.5 Specialised telecare services

There is an overlap between environmental control services and telecare services; environmental control services seek to optimise the ability of those with profound physical disability and deliver a degree of independence and security whereas telecare services aim to safely maintain easily confused or vulnerable individuals within their own domestic environment.

Telecare systems can, for example:

- detect falls or hypothermic conditions/other hazardous situations and automatically summon help
- switch on appropriate lighting if someone arises from bed during the night
- detect if someone wanders
- provide electronic prompts for people with memory loss.

This is an emerging technology and the range of applications can be expected to grow as new technologies are tested and validated. It is expected that much of the equipment will be of low cost/high volume and capable of provision through community equipment services. Such services are not considered specialised services.

5. Identifying and costing equipment for people with complex physical disabilities

5.1 Existing currencies

- out-patient attendances
- non face to face out-patient appointments
- cost per case
- annual fee for maintenance of equipment.

5.2 Classification systems

Currently there are no classification systems for specialised equipment service activity.

5.3 Costing activity

Please refer to the latest Department of Health Guidance on Payment by Results for up to date information on national tariffs and activity included/excluded from tariff.

Please note that not all the Payment by Results inclusions and exclusions listed below are specialised activity, but they are included here for completeness.

Included in 2009/10 Payment by Results:

- out-patient attendances - see PbR list of inclusions and exclusions by Treatment Function Code
- non face to face out-patient appointments - but NON MANDATORY tariff only

Excluded from 2009/10 Payment by Results therefore a local tariff is negotiated:

- bespoke prostheses designed and manufactured for individual patients
- rehabilitation services and out-patient attendances
- community health services.

5.4 Outstanding issues raised regarding currencies and classification systems

For all specialised equipment services appropriate currencies and costing mechanisms need to be developed with particular regard to equipment maintenance including service repairs and replacements.

6. National standards and guidelines

Available from the Department of Work and Pensions - www.dwp.gov.uk

- Department of Work and Pensions (2008) 'Access to work'

Available from the Department for Children, Schools and Families - www.dcsf.gov.uk

- Department for Education and Science (2000) 'Report of the working group on the provision of speech and language therapy services to children with special educational needs (England)'
- Department for Children, Schools and Families (2008) 'Better communication: An action plan to improve services for children and young people with speech, language and communication needs'

Available from the Audit Commission - www.audit-commission.gov.uk

- Audit Commission (2002) 'Fully equipped 2002'

Available from the British Society of Rehabilitation Medicine (BSRM) - www.bsrm.co.uk

- Amputee Medical Rehabilitation Society (1997) 'Congenital limb deficiency – recommended standards of care'
- BSRM (1999) 'From surgical appliances to orthotics - towards an effective service'
- BSRM (2000) 'Electronic assistive technology'

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- BSRM (2003) 'Amputee rehabilitation: recommended standards and guidelines'
- BSRM (2004) 'Guidelines for specialised seating'

Work in progress

- Farrand L and Lord S (expected in 2009) The North West Specialised Communication Aid Service

Endorsements

British Society of Rehabilitation Medicine (BSRM)
Limbless Association

Annex 1: Specialist Prosthetic Centres in England

Facility	Contact Details	Services Offered
Birmingham DSC, West Midlands Rehabilitation Centre, 91 Oak Tree Lane Selly Oak, Birmingham B29 6JA	0121 627 1627 www.southbirminghampct.nhs.uk/services/rehab	Upper and lower limbs
Brighton DSC, Sussex Rehabilitation Centre, Brighton General Hospital, Elm Grove, Brighton BN2 3EX	01273 696011 www.brightonandhovepct.nhs.uk/communityspecialist/rehabilitation	Upper and lower limbs
Bristol DSC, North Bristol NHS Trust, Southmead Hospital, Westbury on Trym, Bristol BS10 5NB	0117 959 5703 www.nbt.nhs.uk	Upper and lower limbs
Cambridge DSC, Addenbrookes Rehabilitation Clinic 9 (ARC 9), Box 120, Hills Road, Cambridge CB2 2QQ	01223 217859	Upper and lower limbs
Carlisle DSC, Carlisle Disablement Services Centre, North Cumbria Acute Hospitals NHS Trust, Cumberland Infirmary, Carlisle CA2 7HY	01228 814783 www.cumbria.nhs.uk	Upper and lower limbs
Charing Cross DSC, Lower Ground Floor, Charing Cross Hospital, Fulham Palace Road, London W6 8RF	0208 846 1144 www.hhnt.org/trust	Lower limbs only
Cleveland DSC, South Tees Acute Hospital NHS Trust, James Cook House, Martin Road, Middlesborough TS4 3BY	01642 854286 www.southtees.nhs.uk	Lower limbs only
Crystal Palace DSC, Bowley Close Rehabilitation Centre, Farquhar Road, London SE19 1SZ	020 3049 7700 www.southwarkpct.nhs.uk	Upper and lower limbs
Derby DSC, Derby Amputee Rehabilitation Centre, Derby Royal Infirmary, London Road, Derby DE1 2QY	01332 254774 www.derbyhospitals.nhs.uk	Lower limbs only
Dorset DSC, Dorset Prosthetic Centre, Royal Bournemouth Hospital, Castle Lane East, Bournemouth BH7 7DW	01202 704363 www.rbch.nhs.uk	Lower limbs only
Exeter DSC, Exeter Mobility Centre, Lister Close, off Wonford Road, Exeter EX2 4DU	01392 403649 www.rdehospital.nhs.uk	Upper and lower limbs
Gillingham (Kent) DSC, Gillingham Disablement Services Centre, Medway Maritime Hospital, Windmill Road, Gillingham ME7 5NY	01634 833929 www.medwaypct.nhs.uk	Upper and lower limbs
Harold Wood (Essex) DSC, Harold Wood Disablement Services Centre, Gubbins	01708 796200	Upper and lower limbs

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Lane, Harold Wood, Romford RM3 0AR	www.haveringpct.nhs.uk	
Hull DSC, Hull and East Yorkshire Hospitals NHS Trust, Artificial Limb Unit, Sykes Street, Hull HU2 8BB	01482 325656 www.hey.nhs.uk	Upper and lower limbs
Isle Of Wight DSC, St Mary's Hospital, Parkhurst Road, Newport, Isle of Wight PO30 5TG	01983 524081 www.iow.nhs.uk	Lower limbs only
Leeds DSC, Specialist Rehabilitation Services, Seacroft Hospital, York Road, Leeds LS14 6UH	0113 206 3392 www.leedsth.nhs.uk	Upper and lower limbs
Leicester DSC, Leicester General Hospital, Gwendolen Road, Leicester LE5 4PW	0116 258 4695 www.uhl-tr.nhs.uk	Lower limbs only
Liverpool DSC, Aintree Hospitals NHS Foundation Trust, Longmoor Lane, Fazakerley, Liverpool L9 7AL	0151 525 5980 www.aintreehospitals.nhs.uk	Upper and lower limbs
Luton and Dunstable DSC, Luton and Dunstable Hospital NHS Trust, Lewsey Road, Luton LU4 0DZ	01582 497121 www.ldh.nhs.uk	Lower limbs only
Manchester DSC, Withington Hospital, Cavendish Road, Withington, Manchester M20 1LB	0161 998 7070 www.smuht.nwest.nhs.uk	Upper and lower limbs
Newcastle DSC, Freeman Road, High Heaton, Newcastle NE7 7AF	0191 223 1184 www.newcastlepct.nhs.uk	Upper and lower limbs
Northampton DSC, Northampton General Hospital, Billing House, Billing Road, Cliftonville, Northampton NN1 5BD	01604 545891 www.northamptongeneral.nhs.uk	Lower limbs only
Norwich DSC, Julian Hospital Site, 201 Bowthorpe Road, Norwich NR2 3UD	01603 288498 www.norwichpct.nhs.uk	Upper and lower limbs
Nottingham DSC, Nottingham University Hospitals NHS Trust, City Hospital Campus, Hucknall Road, Nottingham NG5 1PB	0115 969 1169 www.qmc.nhs.uk	Upper and lower limbs
Oxford DSC, Nuffield Orthopaedic Centre NHS Trust, Windmill Road, Headington, Oxford OX3 7LD	01865 741155 www.noc.nhs.uk	Upper and lower limbs
Plymouth DSC, Plymouth Primary Care NHS Trust, 1 Brest Way (off Morlaix Drive), Derriford, Plymouth PL6 5XW	0845 155 8071 www.plymouth-pct.nhs.uk	Upper and lower limbs
Portsmouth DSC, St Mary's Hospital, Milton Road, Portsmouth PO3 6AD	02392 866971 www.porthosp.nhs.uk	Upper and lower limbs
Preston DSC, Preston Business Centre, Watling street Road, Fulwood, Preston PR2 8DY	01772 716921 www.lancashireteachinghospitals.nhs.uk	Upper and lower limbs
Roehampton DSC, Queen Mary's	0208 487 6000	Upper and lower limbs

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Hospital, Roehampton Lane, London SW15 5PN	www.wandsworth-pct.nhs.uk	
Sheffield DSC, Northern General Hospital, Mobility & Specialised Rehabilitation Centre, Herries Road, Sheffield S5 7AU	0114 271 5807 www.sth.nhs.uk	Upper and lower limbs
Stanmore DSC, RNOHT, Brockley Hill, Stanmore HA7 4LP	020 8954 0020	Upper and lower limbs
Stoke-On-Trent DSC, Haywood Hospital, High Lane, Burslem, Stoke-On-Trent ST6 7AG	01782 556262 www.nsch-tr.wmids.nhs.uk	Lower limbs only
Wirral DSC, Wirral Limb Centre, Clatterbridge Hospital, Bebington, Wirral CH63 4JY	0151 482 7812 www.whnt.nhs.uk	Upper and lower limbs
Wolverhampton DSC, Maltings Mobility Centre, The Maltings, Herbert Street, Wolverhampton WV1 1NQ	01902 444041 www.wolverhamptonhealth.nhs.uk	Lower limbs only

Annex 2: Communication Aids Services in England

Facility	Contact Details	Services offered
Assistive Technology Team, Barnsley Hospital NHS Foundation Trust, Gawber Road, Barnsley, South Yorkshire S75 2EP	Tel. 0122 643 2159	Specialised assessment, provision and review
Access to Communication Technology, West Midlands Regional Rehabilitation Centre, Selly Oak Hospital, Raddlebarn Road, Birmingham, West Midlands B29 6JD	Tel. 0121 627 8235 www.actwmids.nhs.uk	Specialised assessment, provision and review
The Northern Communication Aid Centre, Tyne & Wear NHS Trust, Walkergate Park, Centre for Neuro-Rehabilitation and Neuro-Psychiatry, Benfield Road, Newcastle upon Tyne NE6 4QD	Tel. 0191 287 5240	Specialised assessment, provision and review
North West Assistive Technology, Aintree Hospitals NHS Trust, Aintree House, Longmore Lane, Liverpool, Merseyside L9 7AL	Tel. 0151 529 2022	Specialised assessment, provision and review
Communication Aids Centre, North Bristol NHS Trust, Frenchay Hospital, Frenchay Park Road, Frenchay, Bristol BS16 1LE	Tel. 0117 975 3946 www.cacfrenchay.nhs.uk	Assessment only
Assistive Communication Service, Charing Cross Hospital, Imperial College Healthcare NHS Trust, Fulham Palace Road, London W6 8RF	Tel. 0208-846 1057	Assessment only
Augmentative Communication Service, Wolfson Centre, Great Ormond Street Hospital for Children NHS Trust, Great Ormond Street, London WC1N 3JH	Tel. 0207 405 9200 Ext 1146	Assessment only
ACE Centre North, Hollinwood Business Centre, Oldham, OL8 3QL <i>charitable provider purchased by NHS</i>	Tel.0161 684 2333 www.ace-north.org.uk	Assessment only
ACE Centre Advisory Trust, 92 Windmill Road, Headington, Oxford, OX3 7DR <i>charitable provider purchased by NHS</i>	Tel. 0186 575 9800 www.ace-centre.org.uk	Assessment only
Communication Aids Service, Southampton University Hospitals NHS Trust, Southampton General Hospital, Tremona Road, Shirley, Southampton SO16 6YD	Tel. 0238 079 6455	Assessment only