

Specialised Rehabilitation Services for Brain Injury and Complex Disability (all ages) - Definition No. 7

Preface

This definition is part of the third edition of the Specialised Services National Definitions Set (SSNDS) published in 2010. The second edition of the SSNDS (containing 35 definitions) was published in 2002.

The third edition of the SSNDS contains 34 definitions (4 definitions have been dropped and 3 new definitions have been added). Each definition has been updated or created by an inclusive process involving providers (clinicians, hospital managers, and information and coding staff), commissioners and patients' groups. Every effort has been made to ensure that each definition contains the all the relevant medical condition and treatment classification codes as well as referencing key policy and standards documents. The final version of each definition has been approved by the National Specialised Commissioning Group (NSCG) and endorsed by the relevant professional organisations. The third edition definitions are available from the NSCG website: www.specialisedcommissioning.nhs.uk

The 10 Specialised Commissioning Groups, acting on behalf of their member PCTs, are responsible for the commissioning arrangements for specialised services. The purpose of a definition is to identify the activity that should be regarded as specialised services. 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 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. The SSNDS will be regularly reviewed and further editions will be produced in the future. Definitions may also be updated on an individual basis if that is appropriate.

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 4.5.

Queries and suggestions for possible improvements should be sent to the NSCG's email address at: enquiries@nsscg.nhs.uk

1. General description

Specialised rehabilitation services (i.e. Level 1 units) support patients with complex disability whose rehabilitation needs (i.e. Category A) are beyond the scope of their local rehabilitation services. Details on the different categories of need and levels of service provision are shown in Annexes 1 and 2.

The National Service Framework (NSF) for Long Term Conditions (2005) emphasizes the need for both hospital and community rehabilitation services to provide life-long care, support and rehabilitation. It takes an inclusive view, categorizing conditions by pattern of progression rather than diagnosis, to include sudden onset, e.g. brain and spinal cord injury, intermittent, progressive and stable conditions. The NSF highlights the particular needs of people with profound and complex disability, the large majority of whom will have neurological conditions.

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

Specialised rehabilitation service activity is high cost, low volume and unpredictable.

By concentrating the scarce supply of specialised staff and facilities (e.g. highly specialist therapy equipment) in relatively few centres economies of scale can be achieved in the management of patients with highly complex rehabilitation needs.

There are benefits to patients and their families if patients are managed within a peer group of people facing a similar level of challenge.

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

Definition No.5, Assessment and provision of equipment for people with complex physical disability (all ages)

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

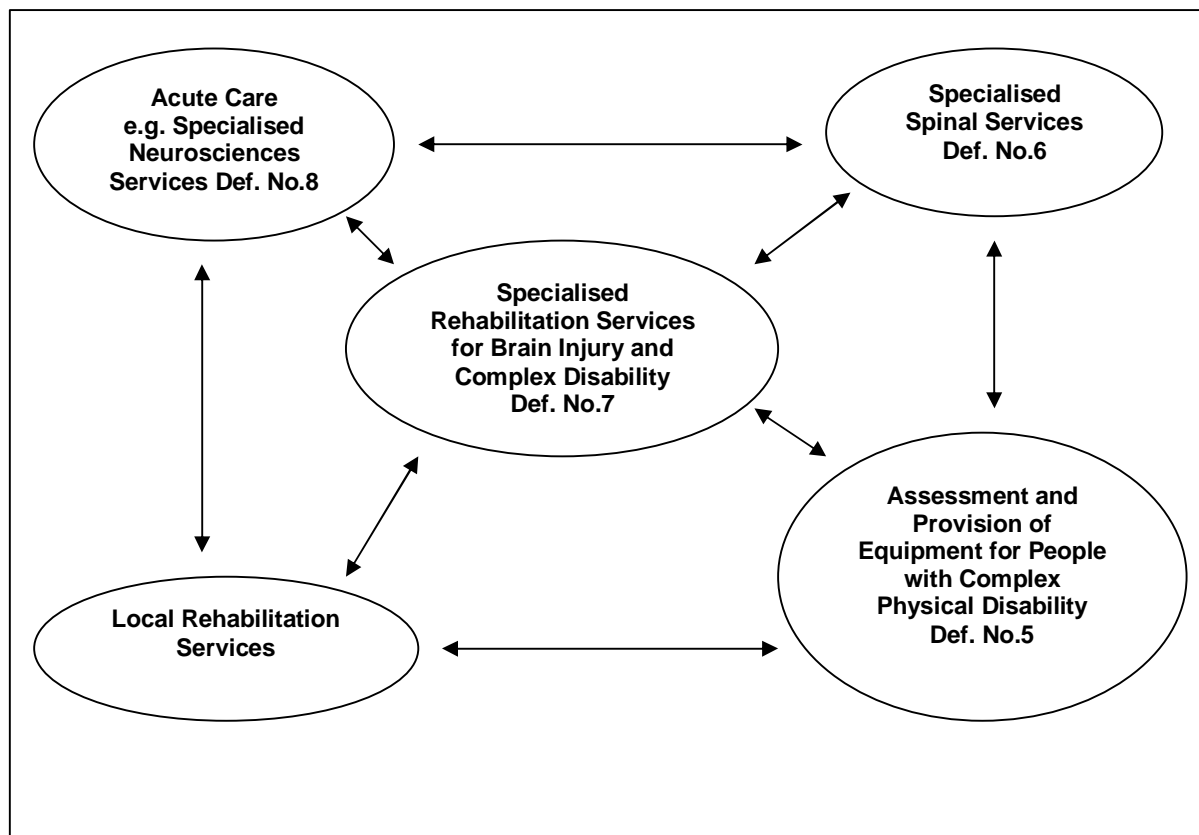
Definition No.8, Specialised neurosciences services (adults)

Definition No.22, Specialised mental health services (all ages)

Definition No.23, Specialised services for children

The following figure illustrates the relationship between some of the above definitions.

Figure 1: Relationship between various different definitions



4. Detailed description of specialised activity

There are four categories of rehabilitation need (categories A-D) and three different levels of service provision (Levels 1-3) as set out below:

- Specialised rehabilitation services are delivered by:
 - Level 1 units - these provide specialised rehabilitation services to patients with Category A needs.
- Non-specialised rehabilitation services are delivered by:
 - Level 2 units - these provide 'local specialist rehabilitation' service to patients with Category B needs (but which may also accept certain patients with Category A needs, where the unit has appropriate facilities, expertise and staffing ratios)
 - Level 3 services - these provide rehabilitation in the context of acute or intermediate care services to Category C and D patients.

Annex 1 gives more detail on the four categories of rehabilitation need and Annex 2 gives more detail on the characteristics of a specialised Level 1 unit rehabilitation service.

Rehabilitation is a process of assessment, treatment and management by which the individual (and their family / carers) are supported to achieve their maximum potential for physical, cognitive, social and psychological function, participation in society and quality of living. Patient goals for rehabilitation vary according to the recovery trajectory and stage of their

condition. Specialised rehabilitation services may be provided along three main (frequently overlapping) pathways:

- **restoration of function** (e.g. for those recovering from a ‘sudden onset’ or ‘intermittent’ condition) where the patient goals are focussed not only on improving independence in daily living activities, but also on participatory roles such as work, parenting, etc
- **disability management** (e.g. for those with stable or progressive conditions) where the patient / family goals are focussed on maintaining existing levels of functioning and participation; compensating for lost function (e.g. through provision of equipment / adaptations); or supporting adjustment to change in the context of deteriorating physical, cognitive, and psychosocial function
- **neuro-palliative rehabilitation** where the goals are focussed on symptom management and interventions to improve quality of life during the later stages of a progressive condition or very severe disability, at the interface between rehabilitation and palliative care.

Specialised rehabilitation services (i.e. Level 1 services) are high-cost, low-volume services catering for patients with injury or illness which has resulted in complex disability. Complex disability includes a subgroup of people with ‘profound disability’; these are more severely affected patients who have help with all their basic care and will often require additional interventions such as spasticity management and postural support programmes, and/or be reliant on highly specialist equipment.

Level 1 units treat patients who require the expert skills of highly trained staff and / or access to highly specialist equipment and facilities. These patients may require relatively long (i.e. 3-6 months) or especially intensive rehabilitation programmes to reach their potential for independence or return to productive roles (e.g. work or parenting). A co-ordinated interdisciplinary rehabilitation team, led by a consultant accredited in the specialty of Rehabilitation Medicine, provides goal-orientated programmes of rehabilitation.

Patients requiring specialised neuro-palliative rehabilitation services are typically those with profound or total disability (e.g. vegetative or low awareness states). Their needs are often substantial and ongoing and typically include support for family members as well as the patient him/herself. The Level 1 unit team often works closely with community rehabilitation teams, specialist nursing homes and palliative care services to support individuals during the later stages of their condition.

Children may require specialised rehabilitation services to establish a window of opportunity which allows normal development to progress, including learning through play as well as integration into a peer group, into the community and local schools. Adolescents and young adults (e.g. 16-25 years) may have particular needs with regard to safeguarding and consent issues, and may require specialised services which combine rehabilitation with ongoing education and development across the transition to adulthood.

4.1 Patients requiring specialised rehabilitation services

As well as having physical disability, people with complex disabilities may have difficulties with communicating; with thinking; and with behaving and interacting appropriately with others. Patients typically present with a diverse mixture of medical, physical, sensory, cognitive, communicative, behavioural and social problems, which require specialist input from a wide range of disciplines working together as a co-ordinated team.

Table 1 below gives examples of the types of condition that commonly give rise to complex disability and may require specialised rehabilitation services. It should be noted that diagnosis is known to be a poor determinant of rehabilitation needs. Instead patients may be more usefully described by their levels of impairment or disability using the World Health Organisation International Classification of Functioning, Disability and Health. Annex 1 describes various tools that can be used to assess rehabilitation needs.

Table 1: Some of the conditions that commonly give rise to complex disability as classified by the Long Term Conditions National Service Framework

Sudden onset conditions	<ul style="list-style-type: none"> • acquired brain injury, due to any cause including trauma, severe stroke, subarachnoid haemorrhage, meningitis, encephalitis, vasculitis, post-surgical, tumour, anoxia • spinal cord conditions e.g. trauma with incomplete spinal cord injury, myelitis, myelopathy, vascular, combined brain/spinal cord injury • peripheral nervous system conditions e.g. Guillain-Barre syndrome, neuropathy-post-critical-illness • multiple trauma
Progressive and intermittent conditions	<ul style="list-style-type: none"> • neurological and neuromuscular conditions (e.g. multiple sclerosis, motor neurone disease, Huntington’s disease, muscular dystrophies, inherited metabolic disorders) • severe musculoskeletal or multi-organ disease (e.g. rheumatoid arthritis with neurological complications) • physical illness / injury complicated by psychiatric or behavioural manifestations
Stable conditions (with / without degenerative change)	<ul style="list-style-type: none"> • congenital conditions e.g. cerebral palsy or spina bifida in children or adults • post polio or other previous neurological injury. Many of these conditions may remain stable for years but subsequently progress with accrual of problems due to age-related change or other secondary complications.

4.2 Specialised rehabilitation services

Specialised rehabilitation is usually a time-limited programme focussed on specific goals. Because individuals change at different rates, the length of intervention may vary. Many people with complex needs require rehabilitation programmes that last 3-6 months. Longer-term intervention is occasionally required, e.g. for severe neurological injury, and is shown to be highly cost-effective for some patients, particularly for young patients with catastrophic brain injuries. Some patients will require repeated episodes of rehabilitation planned over a period of time, with intermittent periods of consolidation.

A Level 1 unit will have staff: patient ratios considerably higher than the minimum British Society of Rehabilitation Medicine (BSRM) standards.

Specialised rehabilitation services vary in their emphasis, but encompass some or all of the following elements:

- medical care in the context of the individual's rehabilitation (including specialist procedures / investigations, and acute out-of-hours medical cover – depending on the caseload)
- tracheostomy and / or ventilatory care
- assessment / management of vegetative and low awareness states, including medico-legal issues and support for families in extreme distress
- cognitive and / or behavioural management, including challenging, aggressive or violent behaviours
- neuropsychiatric care, including risk management, treatment under sections of the Mental Health Act 1983 as amended by the 2007 Mental Health Act
- special facilities: assistive technology such as specialist seating systems, orthotics, environmental control systems / computers or communication aids
- specialist interventions e.g. spasticity management with botulinum toxin or intrathecal baclofen or follow-up procedures e.g. tenotomy, dorsal rhizotomy, deep brain stimulation
- specialist vocational rehabilitation services / support to return to work / education.

Specialised rehabilitation service programmes fall broadly into four categories:

- programmes for people with profound and complex physical disability
- cognitive/behavioural rehabilitation programmes for people who are independently mobile but have severe cognitive / behavioural / neuropsychiatric needs
- specialist community integration / vocational rehabilitation programmes
- programmes for children, adolescents (including 16-18 year olds) or young adults who require specialised rehabilitation in the context of schooling or on-going education, some of whom may have particular needs with regard to safeguarding and consent issues.

Specialised rehabilitation services include a combination of individual and group-based interventions to support appropriate social interaction, communication, life and work skills. They are usually offered as in-patient / residential programmes, but day-patient / out-reach / community programmes may also be provided to support patients with particularly complex needs in their community context.

Annex 1 gives more detail on various tools that have been developed to capture the complexity of rehabilitation needs, as well as information on the different categories of need for rehabilitation and the different levels of service provision.

Annex 2 gives more detail on the principal characteristics of a specialised rehabilitation service (i.e. Level 1 unit).

4.3 Non-specialised rehabilitation services

Patients in the B, C and D rehabilitation categories (see Table 3, Annex 1) require locally provided non-specialised rehabilitation services. These non-specialised services are provided by Level 2, 3a and 3b units (see Table 4, Annex 1); such units will meet the rehabilitation needs of the majority of patients.

5. Identifying and costing activity

5.1 Possible currencies

- out-patient attendances
- out-patient procedures
- non face to face out-patient attendances
- day cases
- in-patients (occupied bed days with/without weighting for complexity)
- day-patient / outreach / community programmes (cost per visit, or per programme of specified length)
- Healthcare Resource Groupings (HRG) codes – the principle codes for neuro-rehabilitation service activity are listed in the table below but note these are for non-specialised rehabilitation services activity only).

HRGv4 codes for non-specialised local neuro-rehabilitation services:

VC04Z Rehabilitation for stroke (without treatment episode)

VC06Z Rehabilitation for brain injuries (without treatment episode)

VC08Z Rehabilitation for spinal cord injuries (without treatment episode)

VC10Z Rehabilitation for pain syndromes (without treatment episode)

VC12Z Rehabilitation for other neurological disorders (without treatment episode)

VC36Z Rehabilitation for other trauma (without treatment episode)

VC42Z Rehabilitation for other disorders (without treatment episode)

5.2 Existing classification systems

ICD-10 diagnostic and OPCS-4.5 intervention classification systems are poor at capturing specialised rehabilitation service activity. Tools to measure complexity of patient needs are described in Annex 1.

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.

(i) Is in scope of 2010/2011 Payment by Results and has a national tariff:

- non face to face out-patient attendances (for TFCs that have a mandatory tariff for face-to-face out-patient attendances) - NON MANDATORY tariff
- out-patient procedures - MANDATORY tariff for 49 procedures only
- admitted patient care -
 - MANDATORY combined tariff for day case and ordinary elective in-patient spells
 - MANDATORY separate tariff for 17 day case and for 18 elective in-patient spells
 - MANDATORY tariff for ordinary non-elective spells
- rehabilitation (acute phase) - NON MANDATORY tariff

(ii) Is excluded from 2010/2011 Payment by Results and therefore requires a locally negotiated tariff:

- services -
 - critical care services (adult, neonatal and paediatric)
 - nationally commissioned services
 - rehabilitation services
- out-patient attendances - see list of specific exclusions
 - rehabilitation out-patient attendances (Treatment Function Code: 314)
- admitted patient care - see list of specific exclusions
- drugs - see list of specific exclusions

5.4 Outstanding issues raised regarding currencies and classification systems

- OPCS-4.5 intervention codes for rehabilitation are listed under Chapter Z: Subsidiary Classification of Sites of Operations; these codes are inadequate to describe the level of intervention, and are often poorly reported.
- Rehabilitation has been unbundled in HRGv4, but this specifically excludes specialised rehabilitation service activity.
- The Department of Health has funded a 5-year Payment by Results Improvement Project for specialised neurological rehabilitation to develop a patient-level costing methodology and subsequent commissioning currencies. Through this programme, in-patient activity for specialist and specialised neuro-rehabilitation services is now being collated through the National Dataset for Specialist Neurorehabilitation Services (see Annex 1). It is expected that this programme will lead to tariff development by 2011-12 or 12-13.
- HRGs for day-patient, outreach and community rehabilitation service activity are being developed as part of the Long Term Conditions programme.

6. National standards and guidelines

Available from the Department of Health - www.dh.gov.uk

- Department of Health (2005) 'National service framework for long term conditions'

Available from the British Society of Rehabilitation Medicine (BSRM) -

www.bsrn.co.uk

- BSRM (2002) 'Standards for specialist in-patient and community rehabilitation services'
- BSRM (2008) 'Standards for rehabilitation services, mapped on to the national service framework for long-term conditions'

Available from the Royal College of Physicians - www.rcplondon.ac.uk

- Royal College of Physicians and BSRM (2003) 'Rehabilitation following acquired brain injury: national guidelines'
- Royal College of Physicians and BSRM (2004) 'Vocational assessment and rehabilitation after acquired brain injury: inter-agency guidelines'
- Royal College of Physicians and BSRM (2008): 'Spasticity in adults: management using botulinum toxin: national guidelines'

- Royal College of Physicians (2008) 'Long term neurological conditions: management at the interface between neurology, rehabilitation and palliative care'

Endorsement

British Society of Rehabilitation Medicine (BSRM)

ANNEX 1: REHABILITATION – COMPLEXITY OF NEED AND LEVELS OF SERVICE PROVISION

Tools to measure complexity of patient rehabilitation need, service inputs and service outcomes for neurological rehabilitation services

A set of tools has been developed to define the complexity of the disability, and the level rehabilitation need. They are undergoing continued testing and refinement, but form part of the National Dataset for Specialist Rehabilitation Services. The database containing the national dataset is held at Northwick Park Hospital as part of a collaborative venture between the British Society for Rehabilitative Medicine (BSRM) and the NHS Information Centre in a programme funded by the Department of Health to inform casemix development in rehabilitation services. The programme is a Payment by Results Improvement Project.

The Rehabilitation Complexity Scale (RCS) is a simple, easy to use, measure of needs for nursing, medical and therapy interventions, which are the principal cost-drivers of rehabilitation services. The RCS is designed to provide a crude assessment of complexity within each of the four patient categories. It has a total score range of 0-15, in 4 subscales: care (0-3), nursing (0-3) therapy (0-6) and medical (0-3). Rehabilitation needs change over time, but typical score ranges for the different categories patient need are shown in Table 2. In general, care or nursing scores of 3, or a therapy score 5, together with a medical score 2, will indicate a need for a specialised service. (See Tables 3 and 4 for more details on the different categories of patient needs and levels of rehabilitation service provision.)

Table 2: Typical RCS score ranges for the different categories of patient needs

RCS subscale	Category of patient need for rehabilitation			
	Category A	Category B	Category C	Category D
Care	1-3	1-2	1-2	1-2
Nursing	1-3	1-2	0-1	0-1
Therapy	4-6	3-4	2-4	2-3
Medical	2-3	1-2	2-3	0-1
Total (Median)	8-11	6-9	5-9	4-7

The Northwick Park nursing and therapy Dependency Scales have been developed to provide a more detailed evaluation of needs and service inputs for patients requiring specialised rehabilitation services. These two instruments provide more specific information to assist in the identification of Category A patients, and the relative costs of treatment

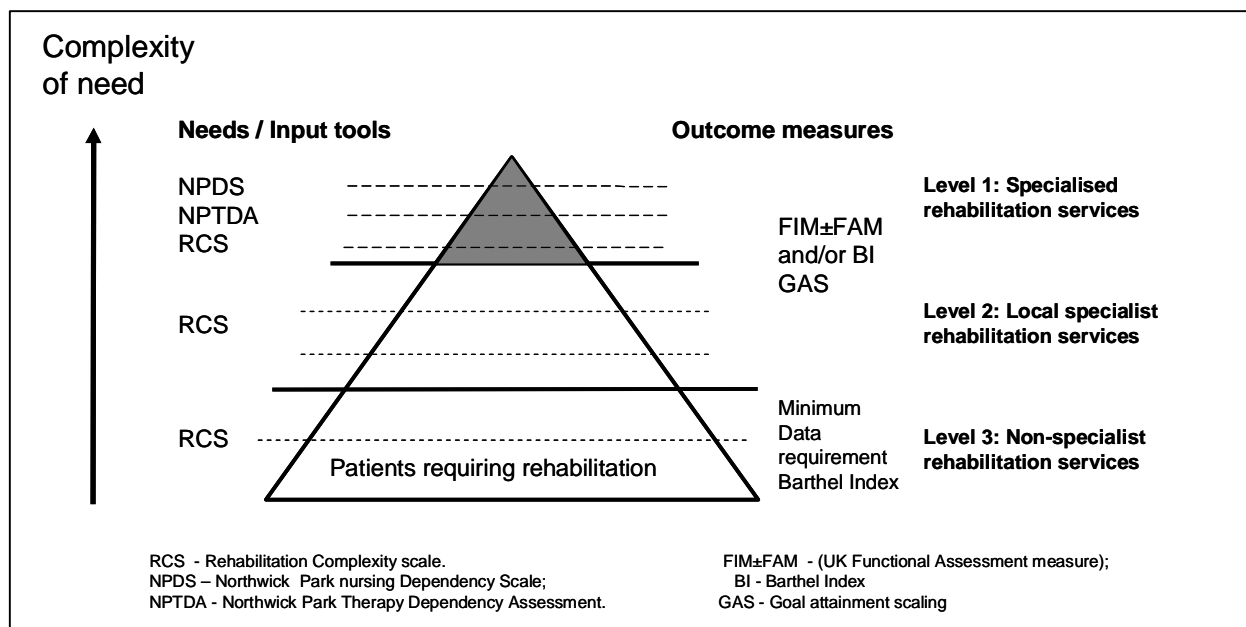
The Northwick Park Dependency Scale (NPDS) is an ordinal measure of basic care and skilled nursing needs. Using a computerised algorithm it produces an assessment of the care and nursing hours needed for an individual patient.

The Northwick Park Therapy Dependency Assessment (NPTDA) is an equivalent tool for assessing therapy needs. Using a computerised algorithm it produces an assessment of the therapy hours for each therapy discipline (i.e. physiotherapy, occupational therapy, speech and language therapy, psychology, dietetics, technicians/engineers, social workers, etc) needed for an individual patient.

All of these tools may be applied either prospectively to measure *needs for intervention* or retrospectively to measure rehabilitation service *inputs actually provided* and hence to identify gaps in the level of service provision.

Figure 2 below shows the scheme that has been recommended by the HRG Expert Working Group for Rehabilitation to measure casemix for the purpose of tariff banding under the Payment by Results programme.

Figure 2: Tools for measuring complexity of need, inputs and outcomes across the three levels of rehabilitation service provision



Note on Figure2: A hierarchical system of data collection has been developed, so that low cost/high volume services are not over-burdened by data collection, The RCS and Barthel Index offer simple practical measurement of complexity and outcome for the purposes of banding in the Level 2 and 3 services. In Level 1 services, the Northwick Park Dependency Scales and the Functional Assessment Measure or Goal Attainment scaling provide more detailed definition of the needs and interventions as well as opportunities for evaluation of outcomes and cost-efficiency in Category A patients.

Table 3: Four categories of patient need for rehabilitation services

Patients with Category A rehabilitation needs (requiring Level 1 specialised services)

- Patients have complex or profound disabilities e.g. severe physical, cognitive communicative disabilities or challenging behaviours.
- Patient goals for rehabilitation may include:
 - improved physical, cognitive, social and psychological function / independence in activities in and around the home
 - participation in societal roles (e.g. work / parenting / relationships)
 - disability management e.g. maintain existing function; manage unwanted behaviours / facilitate adjustment to change
 - improved quality of life and living including symptom management, complex care planning, support for family and carers, including neuro-palliative rehabilitation.
- Patients have highly complex rehabilitation needs and require specialised facilities and a higher level of input from more skilled staff than provided in the local specialist rehabilitation unit. In particular rehabilitation will usually include one or more of the following:
 - intensive, co-ordinated interdisciplinary intervention from 4 or more therapy* disciplines, in addition to specialist rehabilitation medical / nursing care in a rehabilitative environment
 - medium length to long term rehabilitation programme required to achieve rehabilitation goals – typically 2-4 months, but up 6 months or more, providing this can be justified by measurable outcomes
 - very high intensity staffing ratios e.g. 24 hour 1:1 nurse “specialising”, individual patient therapy sessions involving 2-3 trained therapists at any one time
 - highest level facilities / equipment e.g. bespoke assistive technology / seating systems, orthotics, environmental control systems / computers or communication aids, ventilators
 - complex vocational rehabilitation including inter-disciplinary assessment / multi-agency intervention to support return to work, vocational retraining, or withdrawal from work / financial planning, as appropriate.
- Patients may also require:
 - highly specialist clinical input e.g. for tracheostomy weaning, cognitive and / or behavioural management, low awareness states, or dealing with families in extreme distress
 - ongoing investigation / treatment of complex / unstable medical problems in the context of an acute hospital setting
 - neuro-psychiatric care including: risk management, treatment under sections of the Mental Health Act
 - support for medico-legal matters including mental capacity and consent issues.
- Patients are treated in a specialised rehabilitation unit (i.e. a Level 1 unit).
- Patients may on occasion be treated in a Level 2 unit depending on the availability of expert staff and specialist facilities as well as appropriate staffing ratios.

Patients with Category B rehabilitation needs

- Patients have moderate to severe physical, cognitive and / or communicative disabilities which may include mild-moderate behavioural problems.
- Patient goals for rehabilitation may be as for Category A patients.
- Patients require rehabilitation from expert staff in a dedicated rehabilitation unit with appropriate specialist facilities.

- In particular rehabilitation will usually include one or more of the following:
 - intensive co-ordinated interdisciplinary intervention from 2-4 therapy disciplines in addition to specialist rehabilitation medical / nursing care in a rehabilitative environment
 - medium length rehabilitation programme required to achieve rehabilitation goals – typically 1-3 months, but up to a maximum of 6 months, providing this can be justified by measurable outcomes
 - special facilities/ equipment (e.g. specialist mobility / training aids, orthotics, assistive technology) or interventions (e.g. spasticity management with botulinum toxin or intrathecal baclofen)
 - interventions to support goals such as return to work, or resumption of other extended activities of daily living, e.g. home-making, managing personal finances, etc
- Patients may also have medical problems requiring ongoing investigation / treatment.
- Patients are treated in a local specialist rehabilitation unit (i.e. a Level 2 unit).

Patients with Category C rehabilitation needs

- Patient goals are typically focused on restoration of function / independence and co-ordinated discharge planning with a view to continuing rehabilitation in the community.
- Patients require rehabilitation in the context of their specialist treatment as part of a specific diagnostic group (e.g. stroke).
- Patients may be medically unstable or require specialist medical investigation / procedures for the specific condition.
- Patients usually require less intensive rehabilitation intervention from 1-3 therapy disciplines in relatively short rehabilitation programmes (i.e. up to 6 weeks).
- Patients are treated by a local specialist team (i.e. Level 3a service) which may be led by consultants in specialties other than Rehabilitative Medicine (e.g. neurology / stroke medicine) and staffed by therapy and nursing teams with specialist expertise in the target condition.

Patients with Category D rehabilitation needs

- Patient goals are typically focused on restoration of function / independence and co-ordinated discharge planning with a view to continuing rehabilitation in the community if necessary.
- Patients have a wide range of conditions but are usually medically stable.
- Patients require less intensive rehabilitation intervention from 1-3 therapy disciplines in relatively short rehabilitation programmes (i.e. up to 8 weeks)
- Co-ordinated discharge planning is a key goal for the rehabilitation programme.
- Patients receive an in-patient local non-specialist rehabilitation service (i.e. Level 3b) which is often led by non-medical staff.

* Therapy disciplines include: physiotherapy, occupational therapy, speech and language therapy, psychology, dietetics, social work, orthotics, rehabilitation engineering, vocational / educational support (including play therapy in children's settings).

Table 4: Levels of rehabilitation service provision

Level 1 unit (specialised rehabilitation services):

- treats patients with Category A rehabilitation needs
- has a relatively high proportion of complex cases as defined by the RCS / NPDS / NPTDA scales
- serves a 1-3 million catchment population
- is led by a consultant trained and accredited in Rehabilitation Medicine (and/or Neuropsychiatrist, depending on unit type)
- has a dedicated inter-disciplinary team and highly specialised equipment / facilities
- meets the BSRM standards for specialised rehabilitation services
- is required to report annual full set of clinical data as defined by the U.K. National Dataset for Specialist Rehabilitation Services.

Level 2 unit (local specialist rehabilitation services):

- treats patients with Category B rehabilitation needs plus a number of Category A patients (see note)
- has a lower proportion of complex cases as defined by the RCS / NPDS / NPTDA scales
- serves a 250,000-1 million catchment population
- is led/supported by a consultant in trained and accredited Rehabilitation Medicine
- has a dedicated inter-disciplinary team with special facilities/ equipment appropriate to the needs of the caseload
- meets the required BSRM standards for local specialist rehabilitation services
- is required to report annually at least the minimum clinical dataset as defined by the U.K. National Dataset for Specialist Rehabilitation Services.

Level 3a unit (other local specialist services):

- treats patients with Category C rehabilitation needs
- generally provides for patients with lower rehabilitation needs or more rapidly resolving conditions
- serves a population under 500,000
- led / supported by consultants in specialties other than Rehabilitation Medicine (e.g. neurology / stroke medicine)
- is staffed by therapy and nursing teams with specialist expertise in the target condition may ONLY be identified as 'specialist rehabilitation services' if they meet the required BSRM standards for local specialist rehabilitation services AND report annually at least the minimum clinical dataset as defined by the U.K. National Dataset for Specialist Rehabilitation Services.

Level 3b unit (local non-specialist rehabilitation services):

- treats patients with Category D rehabilitation needs
- provides in-patient local non-specialist rehabilitation services
- often led by non-medical staff (e.g. nurses and therapists)
- is provided in the context of an acute admission or on an intermediate care unit, or in a community setting, etc.

Note: The local specialist rehabilitation unit (i.e. Level 2 unit), depending on the size of population served and the availability of expert staff and facilities, may take a certain proportion of Category A patients, especially in areas that do not have ready access to a Level 1 unit but a Level 1 rehabilitation unit will carry a higher proportion of complex cases as defined by RCS/NPDS/NPTDA than a Level 2 unit.

ANNEX 2: CHARACTERISTICS OF A SPECIALISED REHABILITATION SERVICE (LEVEL 1 UNIT)

- Rehabilitation is provided by a dedicated multi-professional team of nurses, allied health professionals and doctors who have undergone recognised specialist training in rehabilitation.
- The team is led by is led by a consultant trained and accredited in Rehabilitation Medicine (or a Neuro-psychiatry consultant if the sole focus of the service is through cognitive behavioural programmes).
- The team works in an inter-disciplinary, co-ordinated fashion towards an agreed set of goals.
- The service:
 - serves a catchment population of more than a million
 - treats a selected group of patients with complex rehabilitation needs beyond the scope of their local general and specialist rehabilitation services including patients with severe physical, cognitive communicative disabilities or challenging behaviours or other highly complex needs defined by the Northwick Park nursing and therapy dependency tools i.e. the Northwick Park Dependency Scale and the Northwick Park Therapy Dependency Assessment
 - provides additional facilities (e.g. bespoke assistive technology, rehabilitative engineering, acute / specialist medical facilities such as ventilation and dialysis) as well as the facilities provided in a local specialist rehabilitation service (e.g. assistive technology, specialist orthotics, special seating, spasticity management programmes) – albeit often to a higher level
 - has more skilled and experienced staff and higher staffing ratios to cope with the complex case load (see BSRM recommendations for details)
 - meets the Royal College of Physicians and the British Society of Rehabilitation Medicine standards for specialist rehabilitations services
 - monitors input and outcome data for the purpose of benchmarking and quality monitoring
 - reports annual clinical outcome data to the full National Dataset for Specialist Rehabilitation Services
 - advises and support local specialist, general and community rehabilitation teams in the management of patients with complex disabilities
 - provides education and training and contributes to research in the field of specialist rehabilitation.

* Adapted from British Society of Rehabilitation Medicine, 2008 ‘Standards for rehabilitation services, mapped on to the National Service Framework for long-term conditions’