

Paediatric Neurodisability

Sub-specialty Syllabus

Version 3

Approved by the GMC for implementation from 1 August 2023

This document outlines the syllabus to be used by doctors completing Paediatric Neurodisability training in the United Kingdom (UK). It accompanies the RCPCH Progress+ curriculum and Assessment Strategy.

This is Version 3. As the document is updated, version numbers will be changed and content changes noted in the table below.

Version number	Date issued	Summary of changes
Version 2	September 2021	Document reviewed as part of the Shape of Paediatrics Training review. Using the Syllabus with ePortfolio' (page 5) updated.
Version 3	August 2023	Updated from Progress to Progress+. Using the syllabus (page 3) updated: reference to Level 1, 2 and 3 removed and replaced with Core and Specialty training.

Introduction



This syllabus supports the completion of the RCPCH Progress+ curriculum and should be used with the curriculum document and Assessment Strategy.

The purpose of the curriculum is to train doctors to acquire a detailed knowledge and understanding of health and illness in babies, children and young people. The curriculum provides a framework for training, articulating the standard required to work at Consultant level, through key progression points during their training, as well as encouraging the pursuit of excellence in all aspects of clinical and wider practice.

The curriculum comprises Learning Outcomes specifying the standard trainees must demonstrate to progress in training and attain a Certificate of Completion of Training (CCT). The syllabi supports the curriculum by providing further instructions and guidance on how the Learning Outcomes can be achieved and demonstrated.

In the context of clinical training and service the term “babies, children and young people” is a common term used by those working in paediatric and child health areas to mean any of those instances in context with clinical training or service. Therefore, in relation to the assessment, the trainee needs to achieve the capabilities for either a baby, child or young person.

Using the Syllabus

Paediatric trainees are required to demonstrate achievement of generic and sub-specialty or General Paediatric Learning Outcomes throughout their training period.

For core trainees (ST1 – 4), there are 11 generic paediatric Learning Outcomes. For specialty training (ST5 – 7), there are a further 11 generic paediatric Learning Outcomes and several additional Learning Outcomes in either General Paediatrics or the sub-specialty to which the trainee has been appointed.

This syllabus contains five interlinked elements, as outlined in Figure 1 which illustrates how each element elaborates on the previous one.

Elements of the Syllabus

The **Introductory Statement** sets the scene for what makes a Neurodisability Paediatrician.

The **Learning Outcomes** are stated at the beginning of each section. These are the outcomes which the trainee must demonstrate they have met to be awarded their Certificate of Completion of Training (CCT) in Paediatrics. Progress towards achievement of the Learning Outcomes is reviewed annually at the Annual Review of Competence Progression (ARCP).

Each Learning Outcome is mapped to the General Medical Council (GMC) Generic Professional Capabilities framework. Each trainee must achieve all the Generic Professional Capabilities to meet the minimum regulatory standards for satisfactory completion of training.

The **Key Capabilities** are mandatory capabilities which must be evidenced by the trainee, in their ePortfolio, to meet the Learning Outcome. Key Capabilities are therefore also mapped to the GMC Generic Professional Capabilities framework..

The **Illustrations** are examples of evidence and give the range of clinical contexts that the trainee may use to support their achievement of the Key Capabilities. These are intended to provide a prompt to the trainee and trainer as to how the overall outcomes might be achieved. They are not intended to be exhaustive and excellent trainees may produce a broader portfolio or include evidence that demonstrates deeper learning. It is not expected that trainees provide ePortfolio evidence against every individual illustration (or a set quota); the aim of assessment is to provide evidence against every Key Capability.

The **Assessment Grid** indicates suggested assessment methods, which may be used to demonstrate the Key Capabilities. Trainees may use differing assessment methods to demonstrate each capability (as indicated in each Assessment Grid), but there must be evidence of the trainee having achieved all Key Capabilities.

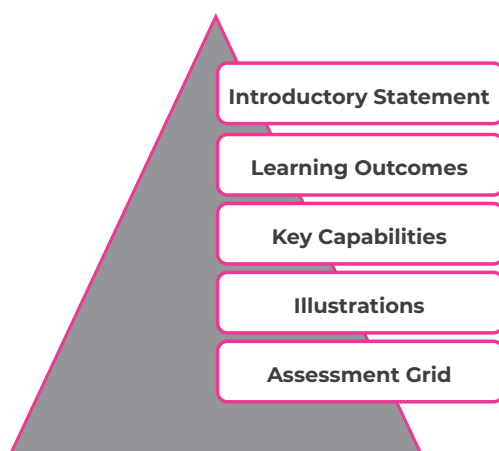


Figure 1: The five elements of the syllabus

Using the Syllabus with ePortfolio

The ePortfolio is used to demonstrate a trainee's progression using assessments, development logs and reflections. Events should be linked to the Progress+ curriculum specifically against the key capabilities at the appropriate level.

Further guidance on using the ePortfolio is available on our website: <https://www.rcpch.ac.uk/resources/rcpch-eportfolio-guidance-doctors>



Paediatric Neurodisability Introductory Statement

A Neurodisability Paediatrician is a doctor who has specialist expertise in the management of children and young people with disabilities, resulting from congenital or acquired long-term conditions. These problems are generally due to impairment in the nervous or musculoskeletal systems and can be static or progressive in nature.

Although they are involved in the diagnosing, the Neurodisability Paediatrician's emphasis is in managing the complex comorbidities seen, targeting the patients' rehabilitation and enablement. While working closely with local teams in the hospital and community (such as Genetics, Neurology, Community Paediatrics, surgical specialties and Palliative Care, as well as NGOs and education and social services), they often provide specialist regional advice in a model of shared care.

At a tertiary level, Neurodisability Paediatricians have developed specialist skills within the neurosciences. This includes in the assessment of motor and neurobehavioural disorders (eg attention deficit hyperactivity disorder [ADHD] and autism) and neurorehabilitation and they often sub-specialise in one or more of these areas.

Sub-specialty Learning Outcomes

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Sub-specialty Learning Outcomes		GMC Generic Professional Capabilities
1.	Demonstrates specialist expertise in the management of children and young people with disabilities, resulting from congenital or acquired long-term conditions.	GPC 2, 3, 6, 7
2.	Effectively manages comorbidities and focuses on rehabilitation and enablement.	GPC 3, 5, 7
3.	Demonstrates the ability to act as a resource across both, hospital and community teams to provide specialist regional advice in a model of shared care.	GPC 5, 8
4.	Demonstrates development of specialist skills within the neurosciences in the assessment of motor and neurobehavioural disorders, including ADHD and autism and in neurorehabilitation.	GPC 3, 5, 6, 7, 9

Sub-specialty Learning Outcome 1

Demonstrates specialist expertise in the management of children and young people with disabilities, resulting from congenital or acquired long-term conditions.	GPC 2, 3, 6, 7
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Key Capabilities

Demonstrates how to assess neurological or neurobehavioural impairments.	GPC 1, 3
Identifies clinical and developmental red flags for potentially progressive neurological disorders and clearly understands the pathways for further assessment.	GPC 1, 3

Illustrations

Concerning the management of children and young people with congenital or acquired long-term conditions:	
1.	Uses evidence-based practice to decide on appropriate interventions and formulate child or young person and family-centred care plans, with identified functional goals to improve function, participation and quality of life.
2.	Recognises the appropriate investigations for children and young people suspected of having one or more physical or behavioural neurodisabling conditions and interprets results and use neurodiagnostic tools, including neuroimaging, neurophysiology, genetics and metabolic biochemistry.
3.	Identifies indicators of potentially progressive disorders and arranges timely expert assessment and management.
4.	Formulates clear differential diagnoses, investigations and management plans for children and young people with a range of motor disorders, such as cerebral palsy, neuromuscular disorders and spina bifida.
5.	Demonstrates the ability to perform detailed assessment of posture, mobility and function, including gait analysis and upper limb motor control.
6.	Explains to parents and families the aetiology and natural history of a wide variety of physical and behavioural neurodisabling conditions, including autism, ADHD, developmental coordination disorder and cerebral palsy.

Sub-specialty Learning Outcome 2

Effectively manages comorbidities and focuses on rehabilitation and enablement.	GPC 3, 5, 7
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Key Capabilities

Identifies the criteria by which clinical and developmental progress is evaluated following an acute neurological impairment, including setting goals and specific intervention strategies.	GPC 3, 5
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Illustrations

1.	Recognises the problems associated with bulbar coordination, swallowing and nutrition in children and young people with physical disability across all age ranges and degrees of functional difficulty, including the knowledge of appropriate assessments and effective management pathways.
2.	Formulates a differential diagnosis and plan of assessment, investigation and management for children and young people with a range of movement disorders, such as cerebral palsy, neuromuscular disorders and spina bifida.
3.	Establishes levels of cognitive, motor and behavioural ability, both in children and young people with complex disability and the wider paediatric population, especially in the context of acute medical illness.
4.	Identifies the criteria by which progress is evaluated and formulates programme goals and specific intervention strategies in children and young people following an acute neurological impairment.
5.	Conducts detailed sleep history and recognises the causes and impact of sleep disorders on participation and quality of life.
6.	Assesses and manages epilepsy in the context of other neurodisabling conditions.
7.	Recognises the provision of specialist equipment and orthotics in children and young people with physical disability across all age ranges and degrees of functional difficulty.
8.	Assesses cognitive and communication ability in children and young people with disability across all age ranges and degrees of functional difficulty.
9.	Establishes the importance of other physical and developmental comorbidities on motor and behavioural function; examples include the impact of gastrointestinal dysfunction on dystonia and specific feeding difficulties in autism.

Sub-specialty Learning Outcome 3



Demonstrates the ability to act as a resource across both, hospital and community teams to provide specialist regional advice in a model of shared care.	GPC 5, 8
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Key Capabilities

Assesses and manages common neurodevelopmental disorders, including ADHD, autistic spectrum disorder and developmental coordination disorder.	GPC 1, 3
Recognises in all aspects of their practice the vulnerability of a child or young person with learning, behavioural or physical disabilities and the need to advocate for these children, young people and families.	GPC 1, 3, 5, 7
Works effectively as part of a multidisciplinary team (MDT) and demonstrates clear leadership skills in the assessment and management of a variety of behavioural, developmental and functional neurodisabilities.	GPC 5

Illustrations

1.	Recognises all mental health needs and the mental states of any child or young person, taking into account their age, stage of development and functional ability and refers on for expert assessment, when needed.
2.	Prescribes or offers advice to children, young people, families and other health professionals on the appropriate use of medications used in behavioural and physical neurodisability, highlighting their off-label use (eg botulinum toxin A injections) and advises on neurosurgical techniques, such as intrathecal baclofen pumps and selective dorsal rhizotomy.

Sub-specialty Learning Outcome 4

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Demonstrates development of specialist skills within the neurosciences in the assessment of motor and neurobehavioural disorders, including ADHD and autism and in neurorehabilitation.	GPC 3, 5, 6, 7, 9
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Key Capabilities

Assesses neurological or neurobehavioural impairments, understanding their aetiology, sequelae and natural history.	GPC 3, 5
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Illustrations

1.	Uses and interprets validated standardised assessment tools used in the assessment of children and young people with both physical and behavioural neurodisability.
2.	Assesses and appreciates the impact of sensory impairment on a child's development and understands pathways to seek specialist assessment and intervention, when necessary.
3.	Recognises indicators of complex language disorders or where communication skills are regressing, liaising appropriately with colleagues regarding specialist investigations and management.
4.	Conducts social communication histories and recognises indicators of autism spectrum disorders, including undertaking autism spectrum diagnostic assessments, in conjunction with other professionals.
5.	Recognises common neurodevelopmental disorders and behavioural phenotypes, such as ADHD, Tourette syndrome and conduct disorder, including associated comorbidities.

Assessment Grid

This table suggests assessment tools which may be used to assess the Key Capabilities for these Learning Outcomes. This is not an exhaustive list and trainees are permitted to use other methods within the RCPCH Assessment Strategy to demonstrate achievement of the Learning Outcome, where they can demonstrate these are suitable.

Key Capabilities	Assessment / Supervised Learning Event suggestions										
	Paediatric Mini Clinical Evaluation (Mini-CEX)	Paediatric Case-based Discussion (CbD)	Paediatric Case-based Assessment of Performance (DOP/AoP)	Directly Observed Procedure / Assessment of Performance (DOP/AoP)	Acute Care Assessment Tool (ACAT)	Discussion of Correspondence (DOC)	Clinical Leadership Assessment Skills (LEADER)	Handover Assessment Tool (HAT)	Paediatric Multi Source Feedback (MSF)	Paediatric Carers for Children Feedback (Paed CCF)	Other
Demonstrates how to assess neurological or neurobehavioural impairments.	✓	✓									
Identifies clinical and developmental red flags for potentially progressive neurological disorders and clearly understands the pathways for further assessment.	✓	✓						✓			
Identifies the criteria by which clinical and developmental progress is evaluated following an acute neurological impairment, including setting goals and specific intervention strategies.	✓	✓				✓					
Assesses and manages common neurodevelopmental disorders, including ADHD, autistic spectrum disorder and developmental coordination disorder.	✓	✓					✓				
Recognises in all aspects of their practice the vulnerability of a child or young person with learning, behavioural or physical disabilities and the need to advocate for these children, young people and families.	✓	✓						✓	✓		
Works effectively as part of a multidisciplinary team (MDT) and demonstrates clear leadership skills in the assessment and management of a variety of behavioural, developmental and functional neurodisabilities.	✓	✓						✓			
Assesses neurological or neurobehavioural impairments, understanding their aetiology, sequelae and natural history.	✓	✓					✓				

