



**INSTITUTE  
OF MEDICINE**

ROYAL COLLEGE OF  
PHYSICIANS OF IRELAND

HIGHER SPECIALIST TRAINING IN

# NEUROLOGY

OUTCOME-BASED EDUCATION – OBE CURRICULUM



**This curriculum of Higher Specialist Training in Neurology was developed in 2023 by a working group led by Prof David Bradley and Dr Lisa Costelloe, National Specialty Directors, Dr Ann O’Shaughnessy, Head of Education, and by the Neurology Specialty Training Committee. The curriculum is approved by the Institute of Medicine.**

Version	Date Published	Last Edited By	Version Comments
1.0	01 July 2023	Mariangela Esposito	New OBE Curriculum

## *National Specialty Directors’ Foreword*

The Neurology HST Programme aims to deliver expert Neurologists with a broad range of clinical and academic skills. This curriculum is designed to produce well-rounded graduates with the ability to manage all common neurological presentations and disorders while supporting the development of subspecialty expertise and academic interests.

The RCPI Outcome Based Education (OBE) project concerns the transition of the current minimum requirements model of the neurology curriculum and training across to OBE which is more in line with other countries in Europe, Canada, Australia and the US.

This project is one of the key initiatives of the RCPI’s Strategic Plan 2021–2024 which aims to enhance the quality of Ireland’s BST and HST training programmes to ensure they are aligned with international best practices and standards. This will involve a considerable change to both the structure and assessment of the curriculum and as such requires input from multiple stakeholders to ensure that any changes are valid and robust.

It was decided that a focussed workshop would take place involving both NSDs, current SpR representatives, and Neurology trainers from several training sites in order to ensure that multiple perspectives were captured, and discussion could take place. This meeting took place in the RCPI on 24<sup>th</sup> March 2023 and comprised a number of specific agenda items.

We began by conducting an initial review of the specialty section of the current Neurology curriculum, with specific emphasis on the content. There are 41 different areas identified within the specialty section of the curriculum and following group discussion, this was pared back into nine main training areas. This is similar but not identical to the UK model. The nine core specialty areas were identified as: disorders of cognition and consciousness; headaches and cranial neuralgias; seizures and epilepsy; movement disorders; neuromuscular disorders; cerebrovascular disorders; neuroinflammatory disorders; neuroinfectious disease; functional neurological disorders.

When these core areas were identified we then began outlining specific training outcomes for each of the nine areas. These are outlined in the Specialty Section of the following document .

We would like to thank all the Trainers and Trainees that took part in this process.

We are excited to be part of the ongoing development of the Neurology HST programme with our colleagues in the RCPI and our Trainers around the country.

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## 1. INTRODUCTION

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*This section includes an overview of the higher specialist training programme as well as an overview of this curriculum document*

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### 1.1. Purpose of training

This programme is designed to provide the training and professional development necessary to work as a Consultant Neurologist, providing expert care to patients with Neurological disorders. This is achieved by providing neurology training in approved training posts, under the supervision of certified trainers, in order to satisfy the outcomes listed in the Curriculum. Each post provides a trainee with a named trainer and the programme is under the direction of the National Specialty Directors for Neurology.

### 1.2. Purpose of the curriculum

The purpose of the curriculum is to guide the trainee towards achieving the educational outcomes necessary to function as an independent Neurologist. The curriculum defines the relevant processes, content, outcomes, and requirements to be achieved. It stipulates the overarching goals, outcomes, expected learning experiences, instructional resources and assessments that comprise the Higher Specialist Training (HST) programme. It provides a framework for certifying successful completion of HST programme.

In keeping with developments in medical education and to ensure alignment with international best practice and standards, the Royal College of Physicians (RCPI) have implemented an Outcomes Based Education (OBE) approach. This curriculum design differs from traditional “minimum requirement” designs in that the learning process and desired end-product of training (outcomes) are at the forefront of the design to provide the essential training opportunities and experiences to achieve those outcomes.

### 1.3. How to use the curriculum

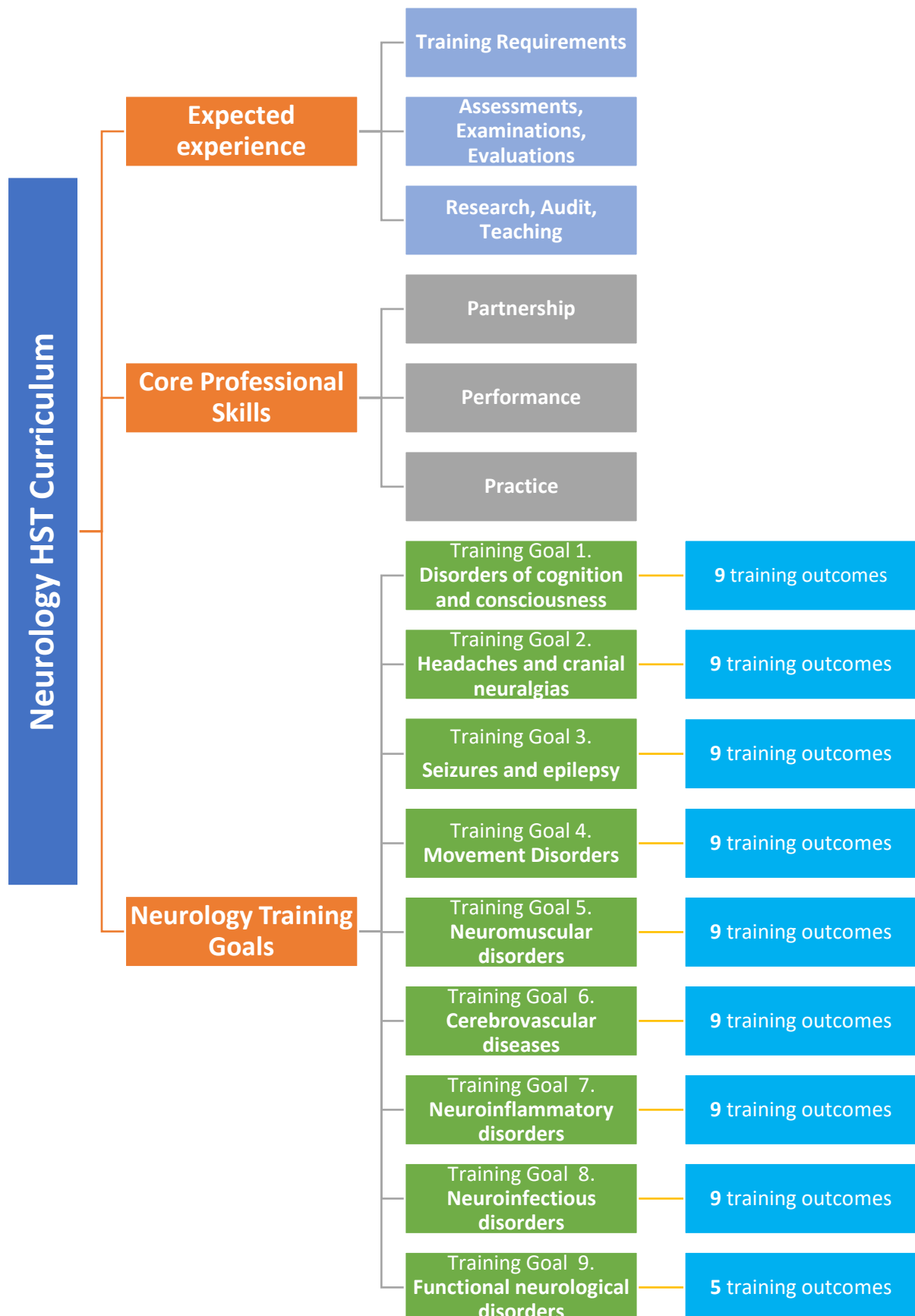
It is expected that both Trainees and Trainers have a good working knowledge of the curriculum and should use it as a guide for the training programme. Trainers are encouraged to use the curriculum as the foundation of their discussions with Trainees, particularly during goals-setting, feedback, and appraisal processes.

Each Trainee is expected to engage with the curriculum by maintaining an ePortfolio in which assessments and feedback opportunities must be recorded. The ePortfolio allows Trainees to build up evidence to inform decisions about their progress at the annual reviews. It also allows trainees to monitor their progress so they are on track to complete the necessary outcomes by the end of the programme, or identify areas that need extra attention or support. It is imperative that the trainees keep an up-to-date ePortfolio throughout the duration of their programme.

### 1.4. Reference to rules and regulations

Please refer to the following sections within the Neurology HST Training Handbook for rules and regulations associated with this post. Policies, procedures, relevant documents, and Training Handbooks can be accessed on the RCPI website following [this link](#).

### 1.5 Overview of Curriculum Sections and Training Goals



## 2. EXPECTED EXPERIENCE

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*This section details the training experience that all Trainees are expected to complete over the course of the higher specialist training in Neurology*

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## 2.1. Post structure

The duration of HST in Neurology is 5 years. A minimum of three years must be spent in clinical posts provided by the Neurology HST scheme; while all 5 years can be completed in HST training posts, trainees are encouraged to consider Out of Programme (OPE) training opportunities as part of their programme (see below).

**Core training:** Trainees must spend the first two years of training in HST clinical posts in Ireland. The programme aims to be flexible in terms of sequence of training after this time. The first two years are directed towards acquiring a broad general experience of Neurology under appropriate supervision. An increase in the content of hands-on experience follows naturally and, as confidence is gained and abilities are acquired, the trainee will be encouraged to assume a greater degree of responsibility and independence.

**Our of Clinical Programme Experience (OCPE):** Up to one year of training credit may be gained from a period of full-time research in a relevant area. A further year of training credit may be gained from full time clinical training outside of the HST-accredited training posts e.g. a subspecialty fellowship. These Out of Programme experience (OCPE) years (research or clinical) must be preapproved and retrospective credit cannot be applied.

**Training Principles:** During the period of training the trainee must take increasing responsibility for seeing patients, undertaking ward consultations, making decisions and operating at a level of responsibility which would prepare him/her for practice as an independent Consultant. The trainee should undertake three outpatient clinics weekly throughout the training period. This may be reduced to two, but never routinely increased to four. New patients should be seen throughout the training period under suitable supervision in outpatient settings and the consultant trainer should review ward consultations directly with the trainee. Supervision should be particularly close during the first one or two years. Particularly experienced trainees may undertake the running of an outpatient clinic on their own without direct consultant supervision later in the programme. Over the course of HST, Trainees are expected to gain experience in a variety of hospital settings, including regional posts where possible. At the start of each post, fill out a Personal Goals form with their trainer and upload it on ePortfolio; the form should be agreed and signed by both Trainee & Trainer.

**Generic Professional Skills:** Generic knowledge, skills and attitudes support competencies that are common to good medical practice in all of the medical and related specialties. It is intended that all Trainees should re-affirm those competencies during Higher Specialist Training. No timescale of acquisition is imposed, but failure to make progress towards meeting these important objectives at an early stage would cause concern about a Trainee's suitability and ability to become an independent specialist.

**Recording of Evidence of training:** The target numbers for training items in the following sections represent the recording requirement to document evidence of relevant and varied clinical experience; it is understood that actual number of training experiences is likely to be well in excess of these numbers.



## 2.2. Outpatient Clinics, Ward Rounds, Consultations, Training activities

Attendance at Clinics, participation in Ward Rounds and Patient Consultations are required elements of all posts throughout the programme. The timetable and frequency of attendance should be agreed with the assigned trainer at the beginning of the post.

This table provides an overview of the expected experience a Specialist Registrar in Neurology should gain regarding clinics attendance, ward rounds, consultations, and other training activities. All these activities should be recorded on ePortfolio using the respective form.

<b>OUTPATIENT CLINICS</b>		
<b>Clinic</b>	<b>Expected Experience</b>	<b>ePortfolio Form</b>
General Neurology	Attend at least 1 per week, record attendance	Clinics
Specialised Neurology Clinics	Attend at least 1 per week, record attendance	
<b>WARD ROUNDS/CONSULTATIONS</b>		
<b>Type</b>	<b>Expected Experience</b>	<b>ePortfolio Form</b>
Consultant-led	Attend at least 1 per week, record attendance	Clinical Activities
Consultation	Attend at least 1 per week, record attendance	
<b>EMERGENCIES/COMPLICATED CASES</b>		
<b>Type</b>	<b>Expected Experience</b>	<b>ePortfolio Form</b>
Diagnosis of nature of problem and its presentation, emergency case for investigation	Record 5 cases per year of training in Neurology	Cases
<b>PROCEDURES, PRACTICAL/SURGICAL SKILLS</b>		
<b>Type</b>	<b>Expected Experience</b>	<b>ePortfolio Form</b>
Neuroimaging Interpretation	Record 20 examples over the course of HST	Procedures, Skills & DOPS
Neuropathology Interpretation	Record 5 examples over the course of HST	
Neurophysiology Interpretation	Record 20 examples over the course of HST	
Lumbar Puncture	Record 20 examples over the course of HST	
<b>ADDITIONAL/SPECIAL EXPERIENCE</b>		
<b>Type</b>	<b>Expected Experience</b>	<b>ePortfolio Form</b>
Intensive Care	Record 5 examples over the course of HST	Additional Special Experience
Neuropsychiatry/psychology	Record 2 examples over the course of HST	
Neuro-ophthalmology/otology	Record 2 examples over the course of HST	
Genetics	Record 2 examples over the course of HST	
Palliative – End of life care	Record 5 examples over the course of HST	
Acute Stroke Treatment (Thrombolysis/Thrombectomy)	Record 5 examples over the course of HST	
<b>MANAGEMENT EXPERIENCE</b>		
<b>Type</b>	<b>Expected Experience</b>	<b>ePortfolio Form</b>
Management Experience	1 over the course of HST	Management Experience

### 2.3. Hospital-based learning and In-house commitments

Trainees are expected to attend a series of in-house commitments as follows:

- Attend at least **1 Neurology Grand Rounds per week**
- Attend at least **1 Journal Club per month**
- Attend at least **1 Radiology conference per month**
- Attend at least **1 MDT Meeting per month**
- Attend at least **5 Neurophysiology meeting or teaching** over the course of HST

### 2.4. Evaluations, Examinations and Assessments

Trainees are expected to:

- Complete **4 quarterly evaluations per training year** (1 evaluation per quarter)
- Complete **1 end of post evaluation at the end of each post** (this can replace the quarterly evaluation in happening at the end of a post)
- Complete **1 end of year evaluation at the end of each training year**
- Complete **the RITE exam once a year, in each HST clinical year of training in Ireland**
- Complete all the **workplace-based assessments** as outlined in the table below and as agreed with Trainer.

This table offers an indication of the minimum workplace-based assessments to be recorded on ePortfolio, frequency and quality of assessment may vary depending on the feedback provided by the assigned Trainer.

WORKPLACE-BASED ASSESSMENTS		
DOPS	Expected Experience	ePortfolio Form
Brainstem death testing (formal)	Record on ePortfolio at least 1 DOPS assessment over the course of HST	Procedures, Skills and DOPS
Bedside cognitive assessment	Record on ePortfolio at least 1 DOPS assessment over the course of HST	
Botulinum toxin injection	Record on ePortfolio at least 3 DOPS assessment over the course of HST	
Nerve blocks e.g., GON	Record on ePortfolio at least 3 DOPS assessment over the course of HST	
Lumbar Puncture	Record on ePortfolio at least 1 DOPS assessment over the course of HST	
CASE-BASED DISCUSSION (CBD)	Expected Experience	ePortfolio Form
Agree type of CBD with assigned trainer	Record on ePortfolio at least 2 CBD per each year of training	Case Based Discussion
MiniCEX	Expected Experience	ePortfolio Form
Agree type of MiniCEX with assigned trainer	Record on ePortfolio at least 2 MiniCEX per each year of training	Mini-CEX

For more information on evaluations, assessment and examinations, please refer to the [Assessment Appendix](#) at the end of this document.

## 2.5. Research, Audit and Teaching experiences

Trainees are expected to complete the following activities:

- Deliver **1 Lecture, 4 Tutorial/Bedside teaching** per each year of training
- Deliver **1 Oral presentation or Poster** per year, outside of Beaumont grand rounds (Desirable)
- Complete **1 Audit or Quality Improvement Project**, per each year of training
- Attend **1 National or International Meeting**, per each year of training

In addition, it is desirable that Trainees aim to

- Complete **1 research project and/or 1 publication**, over the course of HST

## 2.6. Teaching attendance

Trainees are expected to attend the majority of the courses and study days as detailed in the [Teaching Appendix](#), at the end of this document.

## 2.7. Summary of Expected Experience

Experience Type	Trainee is expected to	ePortfolio form
<b>Rotation Requirements</b>	Complete all requirements related to the posts agreed	n/a
<b>Personal Goals</b>	At the start of each post complete a Personal Goals form on ePortfolio, agreed with Trainer and signed by both Trainee & Trainer	Personal Goals
<b>On-call Commitments</b>	<u>Desirable Experience</u> : partake in 1 on-call experience in the different posts attended	Clinical Activities
<b>Clinics</b>	Attend Neurology Outpatient and Subspecialty Clinics as indicated above and as agreed with Trainer. Record attendance per each post on ePortfolio	Clinics
<b>Ward Rounds/Consultations</b>	Gain experience in clinical handover and ward rounds as indicated above and as agreed with Trainer. Record attendance per each post on ePortfolio	Clinical Activities
<b>Emergencies/Complicated Cases</b>	Gain experience in clinical emergencies/complicated cases as indicated above and as agreed with Trainer. Record cases on ePortfolio	Cases
<b>Procedures, Practical/Surgical Skills</b>	Gain experience in procedural, practical, surgical skills as indicated above and as agreed with Trainer. Record experience on ePortfolio	Procedures, Skills & DOPS
<b>Additional/Special Experience</b>	Gain additional/special experience as indicated above and as agreed with Trainer. Record cases on ePortfolio	Cases
<b>Management Experience</b>	Gain experience in clinical management and leadership functions and as agreed with Trainer. Record attendance per each post on ePortfolio	Management Experience
<b>Deliver Teaching</b>	Record on ePortfolio episodes where you have delivered Tutorials (at least 4 per year of training), Lectures (at least 1 per year of training), and Bedside teaching (at least 4 per year of training)	Delivery of Teaching
<b>Research</b>	<u>Desirable Experience</u> : actively participate in research, seek to publish a paper and present research at conferences or national/international meetings	Research Activities
<b>Publication</b>	<u>Desirable Experience</u> : complete 1 publication during the training programme	Additional Professional Activities
<b>Presentation</b>	<u>Desirable Experience</u> : Deliver 1 oral presentation or poster per each year of training, outside of Beaumont grand rounds	Additional Professional Activities
<b>Audit</b>	Complete and report on 1 audit or Quality Improvement (QI) per each year of training, either to start, continue or complete	Audit and QI
<b>Attendance at Hospital Based Learning</b>	Each week attend at least 1 Grand Round. Every month attend at least 401 Journal Club, 1 Radiology Conference, 1 MDT Meeting. Attend 5 Neurophysiology meetings or teaching events over the course of HST. Record attendance on ePortfolio	Attendance at Hospital Based Learning
<b>National/International Meetings</b>	Attend 1 per year of training. Record attendance on ePortfolio	Additional Professional Activities

<b>Teaching Attendance</b>	Attend courses and Study Days as detailed in the <a href="#">Teaching Appendix</a> . Record attendance on ePortfolio	Teaching Attendance
<b>Workplace-based Assessments</b>	Complete all the workplace-based assessment as outlined above and as agreed with Trainer. Record respective form on ePortfolio	CBD/DOPS/Mini-CEX
<b>Examinations</b>	1 per every year of clinical training, complete the RITE exam	Examinations
<b>Quarterly and/or End-of-Post Evaluations</b>	Complete a Quarterly Assessment/End of post assessment with Trainer 4 times in each year. Discuss progress and complete the form	Quarterly Assessments/End-of-Post Assessments
<b>End of Year Evaluation</b>	Prepare for the End of Year Evaluation by ensuring the portfolio is up to date and the End of Year Evaluation form is initiated with the assigned Trainer	End of Year Evaluation

### 3. CORE PROFESSIONAL SKILLS

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*This section includes the Medical Council guidelines for medical professional conduct, regarding Partnership, Performance and Practice.*

*These principles are woven within training practice and feedback is formally provided in the Quarterly Evaluations, End of Post, End Year Evaluation.*

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## Partnership

### Communication and interpersonal skills

- Facilitate the exchange of information, be considerate of the interpersonal and group dynamics, and have a respectful and honest approach
- Engage with patients and colleagues in a respectful manner
- Actively listen to the thoughts, concerns, and opinions of others
- Consider data protection, duty of care and appropriate modes of communication when exchanging information with others

### Collaboration

- Collaborate with patients, their families, and colleagues to work in the best interest of the patient, for improved services and to create a positive working environment
- Work cooperatively with colleagues and team members to deliver an excellent standard of care
- Seek to build trust and mutual respect with patients
- Appropriately share knowledge and information, in compliance with GDPR guidelines
- Take on-board available, relevant feedback

### Health Promotion

- Communicate and facilitate discussion around the effect of lifestyle factors on health and promote the ethical practice of evidence-based medicine
- Seek up-to-date evidence on lifestyle factors that:
  - negatively impact health outcomes
  - increase risk of illness
  - positively impact health and decrease risk factors
- Actively promote good health practices with patients individually and collectively

### Caring for patients

- Take into consideration patient's individuality, personal preferences, goals, and the need to provide compassionate and dignified care
- Be familiar with
  - Ethical guidelines
  - Local and national clinical care guidelines
- Act in the patient's best interest
- Engage in shared decision-making and discuss consent

## Performance

### **Patient safety and ethical practice**

- Put the interest of the patient first in decisions and actions
- React in a timely manner to issues identified that may negatively impact the patient's outcome
- Follow safe working practices that impact patient's safety
- Understand ethical practice and the medical council guidelines
- Support a culture of open disclosure and risk reporting
- Be aware of the risk of abuse, social, physical, financial, and otherwise, to vulnerable persons

### **Organisational behaviour and leadership**

- The activities, personnel and resources that impact the functioning of the team, hospital, and health care system
- Understand and work within management systems
- Know the impacts of resources and necessary management
- Demonstrate proficient self-management

### **Wellbeing**

- Be responsible for own well-being and health and its potential impact on the provision of clinical care and patient outcomes
- Be aware of signs of poor health and well-being
- Be cognisant of the risk to patient safety related to poor health and well-being of self and colleagues
- Manage and sustain own's physical and mental well-being



## Practice

### **Continuing competence and lifelong learning**

- Continually seek to learn, improve clinical skills and understand established and emerging theories in the practice of medicine
- Meet career requirements including those of the medical council, employer, and training body
- Be able to identify and optimise teaching opportunities in the workplace and other professional environments
- Develop and deliver teaching using appropriate methods for the environment and target audience

### **Reflective practice and self-awareness**

- Bring awareness to actions and decisions and engage in critical appraisal of own's work to drive lifelong learning and improve practice
- Pay critical attention to the practical values and theories which inform everyday practice
- Be aware of own's level of practice and learning needs
- Evaluate and appraise decisions and actions with consideration as to what you would change in the future
- Seek to role model good professional practice within the health service

### **Quality assurance and improvement**

- Seek opportunities to promote excellence and improvements in clinical care through the audit of practice, active engagement in and the application of clinical research and the dissemination of knowledge at all levels and across teams
- Gain knowledge of quality improvement methodology
- Follow best practices in patient safety
- Conduct ethical and reproducible research

## 4. SPECIALTY SECTION – NEUROLOGY TRAINING GOALS

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*This section includes the Neurology Training Goals that the Trainee should achieve by the end of the higher specialist training.*

*Each Training Goal is broken down into specific and measurable training outcomes.*

*Under each outcome there is an indication of the **recommended** training/learning opportunities and assessment methods.*

*In order to achieve the outcomes it is recommended to agree the most appropriate training and assessment methods with the assigned Trainer..*

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## Training Goal 1 – Disorder of cognition and consciousness

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF RELEVANT NEUROANATOMY, PHYSIOLOGY AND NEUROPATHOLOGY

For the Trainee to demonstrate knowledge of neuroanatomy, physiology and neuropathology relevant to cognitive disorders.

#### Training/learning opportunities

- Self-directed learning
- Study days

#### Recommended Assessment Methods

- Rite Exam
- Case Based Discussion (CBD)

### OUTCOME 2 – HISTORY TAKING

For the Trainee to demonstrate competence in History Taking including collateral history for patients with dementia and related disorders.

#### Training/learning opportunities

- Clinics attendance (in-patient and outpatient)
- Consultations

#### Recommended Assessment Methods

- Feedback Opportunity
- Case Based Discussion

### OUTCOME 3 – PERFORM EXAMINATION

For the Trainee to be able to perform an examination including cognitive examination and capacity assessment and be familiar with relevant legislation.

#### Training/learning opportunities

- Clinics attendance (in-patient and outpatient)
- Consultations
- Course (legislation course – hospital based)

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity
- DOPS on cognitive assessment

**OUTCOME 4 – ORDER AND INTERPRET INVESTIGATIONS**

For the Trainee to understand how to correctly order and interpret relevant Investigations including radiological, neurochemical (CSF/blood), neurophysiological, genetic.

**Training/learning opportunities**

- Clinics attendance (subspecialty clinics: cognitive clinics)
- Consultations
- Study Days
- National Genetic Review Meeting

**Recommended Assessment Methods**

- RITE Exam
- Case Based Discussion (CBD)

**OUTCOME 5 – FORMULATE A DIFFERENTIAL DIAGNOSIS**

For the Trainee to formulate a differential diagnosis and communicate a diagnosis to patients, family/carers.

**Training/learning opportunities**

- Clinics attendance (in-patient and outpatient)
- Consultations

**Recommended Assessment Methods**

- Mini Clinical Examination Exercise (MiniCEX)
- Feedback Opportunity

**OUTCOME 6 – MANAGEMENT OF ACUTE AND EMERGENCY PRESENTATIONS**

For the Trainee to manage acute and emergency presentations.

**Training/learning opportunities**

- Ward
- ICU
- ED

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 7 – CHRONIC DISEASE MANAGEMENT**

For the Trainee to demonstrate proficiency in chronic disease management of cognitive disorders including advanced care planning.

**Training/learning opportunities**

- Clinics
- Ward
- Course (Advanced Care Planning)

**Recommended Assessment Methods**

- Case Based Discussion (CBD)

- Feedback Opportunity

#### **OUTCOME 8 – INCLUSION HEALTH**

For the Trainee to be familiar with the management considerations in Special population including Intellectual Disabilities, young onset dementia, inclusion health.

##### **Training/learning opportunities**

- Clinics
- Ward
- ED

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 9 – INTERACT WITH MDT AND OTHER RELEVANT PROFESSIONS**

For the Trainee to interact with MDT and other relevant professions, e.g. Palliative Care, Psychiatry, Geriatrics, Neuropsychology, Occupational Therapy, Social Work, Community Support Services.

##### **Training/learning opportunities**

- Clinics
- Ward

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## Training Goal 2 – Headache and cranial neuralgias

Over the course of Neurology Training, the Trainee is expected achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF THE PATHOPHYSIOLOGY OF HEADACHES

For the Trainee to demonstrate knowledge of the pathophysiology of primary and secondary headaches.

#### Training/learning opportunities

- Clinics
- Ward Rounds
- On call
- Study Days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 2 – ELICIT COMPREHENSIVE HISTORY

For the Trainee to elicit comprehensive history

#### Training/learning opportunities

- Clinics
- Ward Rounds
- On call
- Study Days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – PERFORM EXAMINATION

For the Trainee to perform focused examination, including identifying signs of raised intracranial pressure.

#### Training/learning opportunities

- Clinics
- Ward Rounds
- On call
- Study Days

#### Recommended Assessment Methods

- MiniCEX
- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 4 – SELECT AND INTERPRET APPROPRIATE INVESTIGATIONS**

For the Trainee to select and interpret appropriate investigations in correct timeframe, including lumbar puncture when necessary.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- DOPS
- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 5 – GENERATE DIFFERENTIAL DIAGNOSIS**

For the Trainee to generate a differential diagnosis – and to communicate the working diagnosis to the patient.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 6 – KNOWLEDGE OF MANAGEMENT OF EMERGENCY HEADACHE PRESENTATIONS**

For the Trainee to demonstrate knowledge of the management of emergency headache presentations.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 7 – CHRONIC HEADACHE MANAGEMENT**

For the Trainee to demonstrate chronic headache management including its psychosocial consequences.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 8 – APPLY KNOWLEDGE TO SPECIAL POPULATIONS**

For the Trainee to apply knowledge of headaches and cranial neuralgias to special populations patient e.g. pregnancy, inclusion health.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 9 – INTERACT WITH MDT MEMBERS**

For the Trainee to demonstrate ability to interact effectively with MDT members or other health professionals.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- MDT Meetings
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity



## Training Goal 3 – Seizures and epilepsy

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF NEUROANATOMY, PHYSIOLOGY AND NEUROPATHOLOGY

For the Trainee to demonstrate knowledge of relevant neuroanatomy, physiology and neuropathology in seizure disorders.

#### Training/learning opportunities

- Self-directed learning
- Study Days

#### Recommended Assessment Methods

- RITE exam
- Case Based Discussion (CBD)

### OUTCOME 2 – HISTORY TAKING

For the Trainee to demonstrate competence in history taking including collateral history and seizure semiology.

#### Training/learning opportunities

- Clinics
- Consultations

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – PERFORM A NEUROLOGICAL EXAMINATION

For the Trainee to be able to perform a neurological examination and be familiar with videos of common seizure types.

#### Training/learning opportunities

- Study Days
- Self-directed learning (online resources)
- Video EEG

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 4 – ORDER AND INTERPRET RELEVANT INVESTIGATIONS**

For the Trainee to understand how to correctly order and interpret relevant radiological, neurophysiological, and genetic investigations of epilepsy.

**Training/learning opportunities**

- Clinics (subspecialty clinics: epilepsy)
- Consultations
- Study Days

**Recommended Assessment Methods**

- RITE exam
- Case Based Discussion (CBD)

**OUTCOME 5 – FORMULATE AND COMMUNICATE A DIFFERENTIAL DIAGNOSIS**

For the Trainee to formulate a differential diagnosis and communicate a diagnosis to patients, family/carers including legal and vocational implications (e.g. driving).

**Training/learning opportunities**

- Clinics
- Consultations
- National Genetic Review Meeting

**Recommended Assessment Methods**

- MiniCEX
- Feedback Opportunity

**OUTCOME 6 – MANAGE ACUTE AND EMERGENCY PRESENTATIONS**

For the Trainee to manage Acute and emergency presentations of seizures and status epilepticus.

**Training/learning opportunities**

- Ward
- ICU
- ED

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 7 – CHRONIC DISEASE MANAGEMENT OF EPILEPSY**

For the Trainee to demonstrate proficiency in chronic disease management of epilepsy including identifying surgical candidates and counselling about SUDEP.

**Training/learning opportunities**

- Clinics
- Ward
- Study Days
- Course

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 8 – MANAGEMENT CONSIDERATIONS IN SPECIAL POPULATIONS**

For the Trainee to be familiar with the management considerations in special populations (e.g. reproductive health, intellectual disabilities, transitional care, inclusion health).

##### **Training/learning opportunities**

- Clinics
- Ward
- ED

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD) for reproductive health
- Feedback Opportunity

#### **OUTCOME 9 – INTERACTION WITH MDT**

For the Trainee to interact with MDT and other relevant professions, *e.g.*, Neurophysiology, Neurosurgery, Psychiatry, Neuropsychology, Community Support Services.

##### **Training/learning opportunities**

- Clinics
- Ward

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## Training Goal 4 – Movement disorders

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF NEUROANATOMY, PHYSIOLOGY AND NEUROPATHOLOGY

For the Trainee to demonstrate knowledge of relevant neuroanatomy, physiology and neuropathology of movement disorders.

#### Training/learning opportunities

- Self-directed learning
- Study Days

#### Recommended Assessment Methods

- RITE exam
- Case Based Discussion (CBD)

### OUTCOME 2 – HISTORY TAKING

For the Trainee to demonstrate competence in History Taking including collateral history and movement phenomenology.

#### Training/learning opportunities

- Clinics
- Consultations

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – PERFORM A NEUROLOGICAL EXAMINATION

For the Trainee to be able to perform a neurological examination and be familiar with videos of common movement disorders.

#### Training/learning opportunities

- Study Days
- Self-directed learning (online resources)
- Videos

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 4 – ORDER AND INTERPRET RELEVANT INVESTIGATIONS

For the Trainee to understand how to correctly order and interpret relevant radiological, neurochemical, neurophysiological, and genetic investigations of movement disorders.

**Training/learning opportunities**

- Clinics (subspecialty clinics: movement disorders)
- Consultations
- Study Days
- National Genetic Review Meeting

**Recommended Assessment Methods**

- RITE exam
- Case Based Discussion (CBD)

**OUTCOME 5 – FORMULATE AND COMMUNICATE A DIFFERENTIAL DIAGNOSIS**

For the Trainee to formulate a differential diagnosis and communicate a diagnosis to patients, family/carers including legal and vocational implications (e.g. driving).

**Training/learning opportunities**

- Clinics
- Consultations

**Recommended Assessment Methods**

- MiniCEX
- Feedback Opportunity

**OUTCOME 6 – MANAGE ACUTE AND EMERGENCY PRESENTATIONS**

For the Trainee to manage acute and emergency presentations of movement disorders.

**Training/learning opportunities**

- Ward
- ICU
- ED

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 7 – CHRONIC DISEASE MANAGEMENT OF MOVEMENT DISORDERS**

For the Trainee to demonstrate proficiency in chronic disease management of movement disorders including identifying candidates for device-assisted therapies, toxin therapy, and advanced care planning and cognitive issues.

**Training/learning opportunities**

- Clinics
- Ward
- Study Days
- Course
- Procedures & Skills (botulinum toxin injection)

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity
- DOPS (botulinum toxin injection -where available)

**OUTCOME 8 – MANAGEMENT CONSIDERATIONS IN SPECIAL POPULATIONS**

For the Trainee to be familiar with the management considerations in special populations (e.g. reproductive health, intellectual disabilities, transitional care, inclusion health).

**Training/learning opportunities**

- Clinics
- Ward
- ED

**Recommended Assessment Methods**

- Case Based Discussion (CBD) for reproductive health
- Feedback Opportunity

**OUTCOME 9 – INTERACT WITH MDT**

For the Trainee to interact with MDT and other relevant professions, *e.g.*, Neurophysiology, Neurosurgery, Psychiatry, Neuropsychology, Community Support Services.

**Training/learning opportunities**

- Clinics
- Ward

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## Training Goal 5 – Neuromuscular disorders

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF ANATOMY AND PATHOPHYSIOLOGY

For the Trainee to demonstrate knowledge of the anatomy and pathophysiology of conditions affecting the peripheral nervous system, neuro-muscular junction, and muscle disorders.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 2 – HISTORY TAKING

For the Trainee to demonstrate ability to take a comprehensive neuromuscular history, including family history associated co-morbidities, risk exposures.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – EXAMINATION OF THE NEUROMUSCULAR SYSTEM

For the Trainee to demonstrate proficiency in the examination of the neuromuscular system, including ocular-motor, bulbar, respiratory and autonomic systems to aid localisation, pattern recognition in neuromuscular disorders.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 4 – REQUEST AND INTERPRET APPROPRIATE INVESTIGATIONS**

For the Trainee to request and interpret appropriate investigations neurophysiology, genetics, imaging, metabolic testing etc.

##### **Training/learning opportunities**

- Clinics
- Ward
- On-call
- Study days

##### **Recommended Assessment Methods**

- DOPS
- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 5 – GENERATE AND COMMUNICATE DIFFERENTIAL DIAGNOSIS**

For the Trainee to generate a differential diagnosis and communicate the diagnosis effectively including prognosis, possible genetic implications etc.

##### **Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 6 – MANAGE ACUTE NEUROMUSCULAR EMERGENCIES**

For the Trainee to be able to manage acute neuromuscular emergencies, including critical care management.

##### **Training/learning opportunities**

- ED
- ICU
- Clinics
- Ward Rounds
- On call
- Study Days

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity



**OUTCOME 7 – MANAGEMENT OF NEUROMUSCULAR DISEASE**

For the Trainee to develop understanding of the management of neuromuscular disease including immune-therapies, genetic therapies and symptomatic management.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 8 – APPLY KNOWLEDGE TO SPECIAL POPULATIONS**

For the Trainee to demonstrate knowledge of management of special population including the transition to adult services.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 9 – INTERACT WITH MDT MEMBERS**

For the Trainee to interact effectively with MDT including intensive care, palliative care etc.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- MDT Meetings
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## Training Goal 6 – Cerebrovascular diseases

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF ANATOMY

For the Trainee to Knowledge of anatomy (including, but not limited to intra-and extra-cranial arterial and venous system).

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 2 – HISTORY TAKING

For the Trainee to conduct a comprehensive vascular history.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – CONDUCT EXAMINATION

For the Trainee to conduct examination, including use of rating scales, such as the NIHSS, modified Rankin.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- DOPS
- MiniCEX

- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 4 – SELECT AND INTERPRET APPROPRIATE INVESTIGATIONS**

For the Trainee to select and interpret appropriate urgent investigations and aetiological work-up.

##### **Training/learning opportunities**

- Clinics
- Ward
- On-call
- Study days

##### **Recommended Assessment Methods**

- DOPS
- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 5 – GENERATE AND COMMUNICATE DIFFERENTIAL DIAGNOSIS**

For the Trainee to generate a differential diagnosis (including stroke mimics) and communicate diagnosis to the patient.

##### **Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 6 – ACUTE NEUROVASCULAR MANAGEMENT**

For the Trainee to achieve skills in the acute neuro-vascular management, including reperfusion strategies in ischaemic stroke, management of intracranial haemorrhage and treatment of cerebral venous sinus thrombosis.

##### **Training/learning opportunities**

- ED
- ICU
- Clinics
- Ward Rounds
- On call
- Study Days

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 7 – MANAGE CHRONIC NEUROVASCULAR DISEASE**

For the Trainee to manage chronic neurovascular disease including secondary prevention, rehabilitation, and psychosocial aspects.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 8 – APPLY KNOWLEDGE TO SPECIAL POPULATIONS**

For the Trainee to apply knowledge to special populations (e.g. pregnancy, end-of-life).

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 9 – CONSULT WITH MDT**

For the Trainee to consult effectively with relevant professions including MDT, radiology.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- MDT Meetings
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## Training Goal 7 – Neuroinflammatory disorders

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF ANATOMY AND PATHOPHYSIOLOGY

For the Trainee to demonstrate knowledge of anatomy and pathophysiology of neuroinflammatory conditions.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 2 – HISTORY TAKING

For the Trainee to demonstrate ability in history taking in acute and chronic setting, including risk factors for autoimmune disease.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – PERFORM EXAMINATION

For the Trainee to perform appropriate examination, including elucidation of systemic features.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 4 – REQUEST AND INTERPRET APPROPRIATE INVESTIGATIONS**

For the Trainee to request and interpret appropriate investigations including CSF analysis, serology, imaging, VER/OCT etc.

**Training/learning opportunities**

- Clinics
- Ward
- On-call
- Study days

**Recommended Assessment Methods**

- DOPS
- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 5 – GENERATE DIFFERENTIAL DIAGNOSIS AND COMMUNICATE TO PATIENT**

For the Trainee to generate a comprehensive differential diagnosis and apply diagnostic criteria e.g., McDonald criteria for MS, in addition to communicate the diagnosis to the patient.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 6 – GENERATE ACUTE MANAGEMENT PLANS**

For the Trainee to generate acute management plans for neuroinflammatory patients.

**Training/learning opportunities**

- ED
- ICU
- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 7 – MANAGEMENT OF NEUROINFLAMMATORY DISORDERS**

For the Trainee to demonstrate proficiency in selection of disease-modifying therapies, symptomatic treatment and knowledge of the risks of immunosuppression, vaccination requirements, family planning considerations etc.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 8 – MANAGEMENT OF NEUROINFLAMMATORY DISORDERS IN SPECIAL SITUATIONS**

For the Trainee to demonstrate knowledge of disease management in special situations including family planning, medical co-morbidities, and transitional care.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 9 – INTERACT WITH MDT MEMBERS**

For the Trainee to interact effectively with MDT and other relevant professions.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- MDT Meetings
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## Training Goal 8 – Neuroinfectious disorders

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – KNOWLEDGE OF PATHOPHYSIOLOGY

For the trainee to demonstrate knowledge of pathophysiology of infections affecting the nervous system.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 2 – HISTORY TAKING

For trainee to demonstrate ability to take a comprehensive history including travel, lifestyle, sexual and occupational factors.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – PERFORM EXAMINATION

For the Trainee to demonstrate proficiency in the examination of patients with suspected neuroinfectious disease.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods



- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 4 – REQUEST AND INTERPRET APPROPRIATE INVESTIGATIONS**

For the Trainee to request and interpret appropriate investigations including CSF, imaging, serology, etc.

##### **Training/learning opportunities**

- Clinics
- Ward
- On-call
- Study days

##### **Recommended Assessment Methods**

- DOPS
- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 5 – GENERATE AND COMMUNICATE DIFFERENTIAL DIAGNOSIS**

For the Trainee to generate a differential diagnosis and communicate this to patient, including public health implications.

##### **Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

#### **OUTCOME 6 – MANAGE NEUROINFECTIOUS DISEASE WITH ID SPECIALISTS**

For the Trainee to be able to participate in the management of neuroinfectious disease in collaboration with infectious disease specialists.

##### **Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

##### **Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 7 – NEUROLOGICAL COMPLICATIONS OF INFECTIOUS DISEASES**

For the Trainee to develop an understanding of the neurological complications of infectious diseases including seizures, stroke etc.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 8 – APPLY KNOWLEDGE TO SPECIAL POPULATIONS**

For the Trainee to demonstrate knowledge of management of special population including immunosuppressed patients.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 9 – INTERACT WITH MDT MEMBERS**

For the Trainee to Interact effectively with MDT including intensive care, infectious disease specialists etc.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- MDT Meetings
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## Training Goal 9 – Functional neurological disorders

Over the course of Neurology Training, the Trainee is expected to achieve proficiency in history-taking, examination, formulation of a differential diagnosis, appropriate investigations and development of treatment strategies appropriate to the complexity of the patient.

### OUTCOME 1 – HISTORY TAKING AND EXAMINATION OF FND

For the Trainee to identify Functional Neurological Disorders (FND) based on a comprehensive history and objective examination findings to support a clear diagnosis on positive grounds.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- MiniCEX
- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 2 – FND AND OTHER NEUROLOGICAL CONDITIONS

For the trainee to recognise that FND can commonly co-exist with other neurological conditions.

#### Training/learning opportunities

- Clinics
- Ward
- On-call
- Study days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

### OUTCOME 3 – IDENTIFY APPROPRIATE INVESTIGATIONS

For the Trainee to identify appropriate Investigations to ensure early and accurate diagnosis.

#### Training/learning opportunities

- Clinics
- Ward Rounds
- On call
- Study Days

#### Recommended Assessment Methods

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 4 – COMMUNICATE DIAGNOSIS OF FND**

For the Trainee to communicate a diagnosis of FND in a manner that contributes constructively to the management of the patient.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

**OUTCOME 5 – FURTHER MANAGEMENT OF FND AND REFERRAL**

For the Trainee to describe the aspects of further management of FND and to refer appropriately to other disciplines including psychiatry and psychology.

**Training/learning opportunities**

- Clinics
- Ward Rounds
- On call
- MDT Meetings
- Study Days

**Recommended Assessment Methods**

- Case Based Discussion (CBD)
- Feedback Opportunity

## 5. APPENDICES

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*This section includes two appendices to the curriculum. The first one is about Assessment (i.e. Workplace Based Assessments, Evaluations and Examinations) the second one is about Teaching (i.e. Courses and Study Days)*

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## ASSESSMENT APPENDIX

## Workplace-Based Assessment and Evaluations

The expression “workplace-based assessments” (WBA) defines all the assessments used to evaluate trainees’ daily clinical practices employed in their work setting. It is primarily based on the observation of trainees’ performance by trainers. Each observation is followed by a trainer’s feedback, with the intent of fostering reflective practice.

### Relevance of Feedback for WBA

Although “assessment” is the keyword in WBA, it is necessary to acknowledge that feedback is an integral part and complementary component of WBA. The main purpose of WBA is to provide specific feedback for trainees. Such feedback is expected to be:

- **Frequent:** the opportunities to provide feedback are preferably given by directly observed practice, but also by indirectly observed activities. Feedback is expected to be frequent and should concern a low-stake event. Rather than being an assessor, the trainer is an observer who is asked to provide feedback in the context of the training opportunity presented at that moment.
- **Timely:** preferably, the feedback should be a direct conversation between trainer and trainee in a timeframe close to the training event. The trainee should then record the feedback on ePortfolio in a timely manner.
- **Constructive:** the recorded feedback would inform both trainee’s practice for future performance and committees for evaluations. Hence, feedback should provide trainees with behavioural guidance on how to improve performance and give committees the context that leads to a rating, so that progression or remediation decisions can be made.

### Types of WBAs in use at RCPI

There is a variety of WBAs used in medical education. They can be categorised into three main groups: *Observation of performance; Discussion of clinical cases; Feedback; Mandatory Evaluations.*

As WBAs at RCPI we use *Observation of performance* via MiniCEX and DOPS; *Discussion of clinical cases* via CBD; *Feedback* via Feedback Opportunity.

*Mandatory Evaluations* are bound to specific events or times of the academic year, for these at RCPI we use: Quarterly Evaluation/End of Post Evaluation; End of Year Evaluation; Penultimate Year Evaluation; Final Year Evaluation.

### Recording WBAs on ePortfolio

It is expected that WBAs are logged on an electronic portfolio. Every trainee has access to an individual ePortfolio where they must record all their assessments, including WBAs. By recording assessments on this platform, ePortfolio serves both the function to provide an individual record of the assessments and to track trainees’ progression.

### Formative and Summative Feedback

The Trainee can record any WBA either as formative or summative with the exception of the *Mandatory Evaluations* (Quarterly/End of Post, End of Year, Penultimate Year, Final Year evaluations).

**If the WBA is logged as formative, the trainee can retain the feedback on record, but this will not be visible to an assessment panel, and it will not count towards progression. If the WBA is logged as summative it will be regularly recorded and it will be fully visible to assessment panels, counting towards progression.**

<b>WORKPLACE-BASED ASSESSMENTS</b>	
<b>CBD   Case Based Discussion</b>	<p>This assessment is developed in three phases:</p> <ol style="list-style-type: none"> <li>1. Planning: The trainee selects two or more medical records to present to the trainer who will choose one for the assessment. Trainee and trainer identify one or more training goals in the curriculum and specific outcomes related to the case. Then the trainer prepares the questions for discussion.</li> <li>2. Discussion: Prevalently, based on the chosen case, the trainer verifies the trainee's clinical reasoning and professional judgment, determining the trainee's diagnostic, decision-making and management skills.</li> <li>3. Feedback: The trainer provides constructive feedback to the trainee.</li> </ol> <p>It is good practice to complete at least one CBD per quarter in each year of training.</p>
<b>DOPS   Direct Observation of Procedural Skills</b>	<p>This assessment is specifically targeted at the evaluation of procedural skills involving patients in a single encounter.</p> <p>In the context of a DOPS, the trainer evaluates the trainee while they are performing a procedure as a part of their clinical routine. This evaluation is assessed by completing a form with pre-set criteria, then followed by direct feedback.</p>
<b>MiniCEX   Mini Clinical Examination Exercise</b>	<p>The trainer is required to observe and assess the interaction between the trainee and a patient. This assessment is developed in three phases:</p> <ol style="list-style-type: none"> <li>1. The trainee is expected to conduct a history taking and/or a physical examination of the patient within a standard timeframe (15 minutes).</li> <li>2. The trainee is then expected to suggest a diagnosis and management plan for the patient based on the history/examination.</li> <li>3. The trainer assesses the overall trainee's performance by using the structured ePortfolio form and provides constructive feedback.</li> </ol>
<b>Feedback Opportunity</b>	<p>Designed to record as much feedback as possible. It is based on observation of the trainees in any clinical and/or non-clinical task. Feedback can be provided by anyone observing the trainee (peer, other supervisors, healthcare staff, juniors). It is possible to turn the feedback into an assessment (CDB, DOPS or MiniCEX)</p>
<b>MANDATORY EVALUATIONS</b>	
<b>QE   Quarterly Evaluation</b>	<p>As the name suggests, the Quarterly Evaluation recurs four times in the academic year, once every academic quarter (every three months).</p> <p>It frequently happens that a Quarterly Evaluation coincides with the end of a post, in which case the Quarterly Evaluation will be substituted by completing an End of Post Evaluation. In this sense the two evaluations are interchangeable, and they can be completed using the same form on ePortfolio.</p>
<b>EOP   End of Post Evaluation</b>	<p>However, if the trainee will remain in the same post at the end of the quarter, it will be necessary to complete a Quarterly Evaluation. Similarly, if the end of a post does not coincide with the end of a quarter, it will be necessary to complete an End of Post Evaluation to assess the end of a post.</p> <p>This means that for every specialty and level of training, a minimum of four Quarterly Evaluation and/or End of Post Evaluation will be completed in an academic year as a mandatory requirement.</p>
<b>EOYA   End of Year Evaluation</b>	<p>The End of Year Evaluation occurs once a year and involves the attendance of an evaluation panel composed of the National Specialty Directors (NSDs); the Specialty Coordinator attends too, to keep records of and facilitate the meeting. The assigned trainer is not supposed to attend this meeting unless there is a valid reason to do so. These meetings are scheduled by the respective Specialty Coordinators and happen sometime before the end of the academic year (between April and June).</p>
<b>PYE   Penultimate Year Evaluation</b>	<p>The Penultimate Year Evaluation occurs in place of the End of Year Evaluation, in the year before the last year of training.</p> <p>It involves the attendance of an evaluation panel composed of the National Specialty Directors (NSDs) and an External Member who is a recognised expert in the Specialty outside of Ireland; the Specialty Coordinator attends too, to keep records of and facilitate the meeting. The assigned trainer is not supposed to attend this meeting unless there is a valid reason to do so.</p>
<b>FYE   Final Year Evaluation</b>	<p>In the last year of training, the End of Year Evaluation is conventionally called Final Year Evaluation, however, its organisation is the same as an End of Year Evaluation.</p>



## Examination

**RITE exam:** The AAN Residency In-service Training Exam (RITE) is one of the assessment methods of this curriculum. The purpose of this exam is not as a certifying or qualifying examination but to be used as a self-assessment tool designed to gauge knowledge of neurology and neuroscience.

## TEACHING APPENDIX

### Courses

ACLS

Delivering Thrombolysis in Clinical Practice

Ethics Foundation

Ethics for General Medicine

An Introduction to Health Research Methods

HST Leadership in Clinical Practice ( > Year 3)

Mastering Communication (Year 1)

Performing Audit (Year 1)

Wellness Matters

Management Course (Year 4/5)

### Study Days

Study days vary from year to year, they comprise a rolling schedule of hospital-provided topic-specific educational days and national/international events selected for their relevance to the Neurology HST curriculum.

Trainees are expected to attend the majority of the study days available and **at least 8 per training year**.