A Guide to Completing the Framework of Competences for the Level 3 Training Special Study Module in Paediatric Epilepsies
### Section 2 General Competences in Paediatric Epilepsies

**Knowledge and Understanding**

*By the end of Level 3 module in Paediatric Epilepsies, trainees will:*

<table>
<thead>
<tr>
<th>Competency</th>
<th>Potential methods used in order to demonstrate and achieve competency</th>
</tr>
</thead>
</table>
| Know pathways of presentation of the wide range of epileptic seizures and epilepsies in babies, children and young people | • Reflections on cases encountered (in-patient, out-patient and neonatal)  
• Log of children newly presenting, at varying ages  
• Case-based discussions (ePaedsCbD) and discussions regarding clinical cases encountered  
• Reflections on presentation pathways encountered during attendance at Paediatric Epilepsy Training (PET) courses |
| Know pathways of presentations of the wide range of non-epileptic disorders which involve paroxysmal episodes in babies, children and young people | • Reflections on cases encountered (in-patient, out-patient and neonatal)  
• Attendance at syncopal/movement disorder/sleep disorder/neurodisability clinics and reflections on cases encountered  
• ePaedsCbD  
• Reflections on cases encountered during child psychiatry clinics  
• Attendance at local Neurophysiology department and reflections on different presentations referred there |
| Know the issues surrounding misdiagnosis in epilepsy and understand the effective management of diagnostic uncertainty and risk | • Use of Clinical Questions to explore literature regarding misdiagnosis in patients with Epilepsies  
• Focus on discussions and teaching at relevant educational meetings or courses  
• Reflections of cases encountered where misdiagnosis was an issue  
• Work with Neurophysiology department or consider attending training courses in Electroencephalogram (EEG) basics in order to understand difficulties in interpretation |
| Be aware of the diverse aetiologies and pathophysiology of epilepsies, underlying aetiologies and co-morbidities | • Reflections on relevant information obtained at educational meetings and Paediatric Training courses  
• Completion of British Paediatric Neurology Association (BPNA) distance learning module in Epilepsy and Paroxysmal Disorders  
• Reflections and logs of patients encountered with various Epilepsy Syndromes and presentations |
| Know the genetics and family patterns of epilepsies, | • Reflections on cases encountered where genetic aetiology was a relevant issue  
• Consider attendance at joint epilepsy/genetics clinics |
underlying aetiologies and co-morbidities

- Use of Clinical Questions to explore literature regarding the genetic basis of Epilepsies
- Reflections from educational meetings or conferences where novel genetic aetiologies for Epilepsies are discussed

Know the functional consequences, prognosis and usual course of epilepsies, underlying aetiologies and co-morbidities including the impact on children, families, education and social life

- Reflections on clinic attendances or visits with Specialist Epilepsy nurses or Family care teams
- Consider attending events for children and young people with Epilepsies
- Reflections on discussions with families, children and young people on the impact of diagnosis
- Reflections on discussions with schools or special schools, and school nursing teams

Know the appropriate assessment and investigations for children with seizures including how to interpret results

- Reflections and logs of cases encountered
- Work with Neurophysiology department or consider attending training courses in Electroencephalogram (EEG) basics
- Attendance at Neuroradiology meetings and reflections on relevant cases encountered
- Reflections on discussions with Clinical Biochemistry team regarding relevant laboratory tests
- Use of Clinical Questions to explore the role and function of various tests

Know and understand the classification and ‘language’ of epilepsy diagnoses

- Reflections of history and background of International League Against Epilepsy (ILAE) classification schema
- Relevant reflections of information obtained at educational meetings and PET courses
- Assessment of clinic letters, specifically focusing on terminology, using Sheffield Assessment Instrument of Letters (SAIL)

Know the range of therapeutic options for epilepsies and related disorders including:
  o when to commence treatment
  o choice of treatment and treatment combinations
  o evaluate risks and benefits of therapeutic options for the individual child or young person
  o goals of treatment for the individual child
  o communication of the above to the child and family

- Reflections on relevant cases encountered in clinic, exploring relevant issues in more detail
- Attendance at PET course or other relevant educational meetings and reflections on experiences encountered
- Clinical Examination Exercise (ePaedMiniCEX), particularly focusing on communication and discussions with family and child/young person
- Reflections on discussions with other health professionals to explore other therapeutic options (e.g. Ketogenic diet, surgical options)
<table>
<thead>
<tr>
<th>Task Description</th>
<th>Relevant Skills</th>
</tr>
</thead>
</table>
| Know the appropriate and effective interventions to use towards the best possible quality of life for the child, minimising the functional impact of seizures and preventing or managing associated medical conditions and mental health problems | - Reflections on cases encountered (consider specific adolescent clinics, child psychiatry clinics and cases encountered as in-patients and out-patients)  
- Reflections encountered with children and young people  
- Consider work with Specialist Epilepsy nurses/Family care teams and within schools |
| Know the objectives of paediatric follow-up for epilepsies, for example, know the positive difference that paediatric care would make, and how frequently the child might need to be seen and why | - Reflective log of clinical cases encountered and reflections on various aspects of care explored within clinic settings  
- ePaedMiniCEX particularly focusing on aspects of communication and management within clinical setting |
| Know when it is appropriate to seek paediatric neurology, neurophysiologist, neuroradiologist, geneticist review or discussion | - Reflections of clinic attendance and discussions with relevant health professionals  
- Reflections or ePaedsCbD regarding cases which have involved multidisciplinary working  
- Reflections of educational meetings attended, which have facilitated a multimodality approach to patient care |
| Know how to coordinate effective emergency health care plans for a range of potential emergency situations arising for children with epilepsies | - Critical appraisal of care management plans  
- Use of clinical audit to review local and national guidelines, in regards to care plan provision  
- Reflections on discussions with families and schools regarding care plans |
| Know how to manage acute complications in children with epilepsies for example acute toxicity, prolonged seizures, increasing seizure frequency, new seizure types, new neurology or developmental concerns | - Reflections and critical appraisal of cases encountered  
- ePaedsCbD or ePaedMiniCEX, focusing on immediate management situations  
- Use of Clinical Questions to explore background literature and evidence-based medicine regarding acute epilepsy complications |
| Know the roles and skills of other professionals who may be working with children with epilepsies, including specialists in other areas of medicine and surgery, | - Reflections on discussions and clinic attendances with relevant professions  
- Consider involvement with relevant voluntary organisations |
| nursing, therapies, education, social services, benefits advice and the voluntary sector |  

---
### Section 2 General Competences in Paediatric Epilepsy

**Skills**

*By the end of Level 3 module in Paediatric Epilepsy, trainees will:*

<table>
<thead>
<tr>
<th>Competency</th>
<th>Potential methods used in order to demonstrate and achieve competency</th>
</tr>
</thead>
</table>
| be able to undertake comprehensive paediatric assessments of children with a range of epilepsies or other seizure disorders | - Reflection and logs of cases encountered, both in-patient and out-patient situations  
   - ePaedsCbD focusing on history-taking and management  
   - ePaedMiniCEX focusing on clinical examination skills  
   - Use of SAIL to review clinic letters generated |
| Understand the vital role of accurate history taking in effectively diagnosing and classifying epilepsies, being aware of the range of paroxysmal disorders presenting in childhood | - Reflections on clinical cases encountered  
   - Reflections on ILAE classification literature  
   - ePaedsCbD focusing on history-taking and classification  
   - Review of clinic letters, using SAIL focusing on history and diagnosis  
   - Reflections on relevant information obtained at educational meetings or courses |
| Be able to effectively elicit relevant signs and symptoms and investigation results important in the diagnosis of seizures, epilepsy syndromes, aetiologies and co-morbidities | - ePaedMiniCEX focusing on clinical examination skills  
   - Reflections and log of cases encountered during epilepsy/syncope/neurodisability/other clinics |
| Be able to use the ILAE classification system and be familiar with diagnostic tools for relevant co-morbidities | - Review of clinic letters, using SAIL, focusing on classification  
   - Relevant reflections of information obtained at educational meetings and PET courses  
   - Use of Clinical Questions to review ILAE classification history, focusing on latest proposal |
| Be able to assess children’s developmental levels                           | - Reflections of cases encountered of children at varying developmental stages  
   - ePaedMiniCEX focusing on developmental review  
   - Consider formal developmental assessment training |
| Be able to collect, review, summarise and interpret                        | - Reflections of cases encountered  
   - Presentations (formal and informal) regarding specific cases (with feedback) |
<table>
<thead>
<tr>
<th>Information from a range of sources about individual children</th>
<th>Use of ePaedsCbD to explore skills required in order to manage patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognise symptoms and signs of serious acute and chronic life-threatening neurological disorders and initiate an appropriate and timely clinical response</td>
<td>Reflections of cases encountered during in-patient and out-patient work, considering work with palliative care/neurodisability teams. ePaedsCbD to discuss relevant cases.</td>
</tr>
<tr>
<td>Be able to formulate effective management plans for children of different ages with epilepsies, including explaining, planning and interpreting investigations and treatment choices</td>
<td>Reflections of cases encountered. ePaedsCbD focusing on management. ePaedMiniCEX focusing on management and communication aspects. Review of clinic letters, using SAIL focusing on management plans and communication.</td>
</tr>
<tr>
<td>Be able to make appropriate use of diagnostic tools, including neuroimaging, neurophysiology, genetic and metabolic investigations</td>
<td>Reflections and logs of cases encountered. Work with Neurophysiology department or consider attending training courses in Electroencephalogram (EEG) basics. Attendance at Neuroradiology meetings and reflections on relevant cases encountered. Reflections on discussions with Clinical Biochemistry and Genetics teams regarding relevant laboratory tests. Use of Clinical Questions to explore the role and function of various tests.</td>
</tr>
<tr>
<td>Liaise with expert colleagues towards the specialist assessment and management of children with epilepsies requiring additional input</td>
<td>Reflections of cases where additional expertise has been required. ePaedsCbD focusing on management and communication. Reflections of presentations within interdepartmental meetings on complex cases.</td>
</tr>
<tr>
<td>Recognise indicators of neurodegenerative diseases and liaising appropriately with expert colleagues, for example Paediatric Neurology, regarding further assessment and management</td>
<td>Reflective logs of cases encountered during neurology and neurodisability clinics. ePaedsCbD of patients with neurodegenerative disorders. Reflections on relevant experiences obtained through educational meetings and courses.</td>
</tr>
<tr>
<td>Competence</td>
<td>Task</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Be able to prepare Medical Advice for Education for children with epilepsies who are undergoing statutory assessment of their special educational needs | - Critical analysis of prepared statements
- ePaedsCbD of cases and reports
- Reflections on relevant experiences gained within school/special schools/with Specialist Epilepsy nurses |
| Be able to anticipate, and prevent where possible, identify and manage correctly associated medical conditions, mental health problems and other comorbidities associated with epilepsies | - Reflective logs of cases encountered (in-patient, out-patient, adolescent clinics, Specialist Epilepsy nurse clinics)
- Reflections on cases encountered during Child Psychiatry clinics
- ePaedsCbD of patients with complex needs, focusing on management |
| Know how to help families get the support and correct advice needed for the child’s participation in social and educational activities | - Consider work with relevant voluntary sector organisations
- Reflections on cases encountered
- Use of Clinical Questions to explore up-to-date information e.g. driving, recreation, career |
| Be able to recognise, plan for, and minimise, the adverse impact of times of transition and crisis | - Reflective logs of cases encountered
- Attendance and reflection on cases encountered during specific adolescent or transition clinics
- Consider attending adult epilepsy clinics to further explore issues relating to increased independence and management |
| Be able to discuss adult models of care with young people and parents at appropriate times | - ePaedMiniCEX focusing on communication with young people and families
- Attendance at, and reflective log, of cases encountered during adolescent clinics or adolescents seen within out-patient clinics
- Review of clinic letters, addressed to young people, using SAIL |
| Understand the importance of seamless care for the child | - Discussions with professionals caring for young adults with epilepsies
- Reflections of cases regarding transition issues |
## Section 2 General Competences in Paediatric Epilepsy

### Values and Attributes

*By the end of Level 3 module in Paediatric Epilepsy, trainees will:*

<table>
<thead>
<tr>
<th>Competency</th>
<th>Potential methods used in order to demonstrate and achieve competency</th>
</tr>
</thead>
</table>
| Know the impact of legal, ethical, religious and cultural considerations on discussions and decisions about appropriate levels of care for children and young people epilepsies | - Reflections of cases encountered, including with the media and surrounding environment, where these issues have been raised  
- Use of Clinical Questions to explore the legal framework and local and national guidelines regarding these issues  
- Reflections on experiences with Specialist Epilepsy nurses where these issues have been explored |
## Section 2 General Competences in Paediatric Epilepsy

**Leadership and Management**

*By the end of Level 3 module in Paediatric Epilepsy, trainees will:*

<table>
<thead>
<tr>
<th>Competency</th>
<th>Potential methods used in order to demonstrate and achieve competency</th>
</tr>
</thead>
</table>
| Be able to plan and implement population policies or strategies in the field of childhood epilepsies | • Work with local and national networks to participate in epilepsy management policies and strategies  
• Consider work within relevant voluntary organisations  
• Audit of local clinical guidelines and participation of implementation of new guidance |
| Understand and participate in structured planning of services for children with epilepsies both within health and across agencies in partnership with parents, children and young people, including development of care pathways | • Reflection on involvement with local management initiatives to improve epilepsy care  
• Consider participation with voluntary sector organisations  
• Audit of local guidelines |
| Understand, implement and audit effectiveness of current national guidelines and quality standards for services for children with epilepsies | • Reflection of current national guidance and standards  
• Audit of local adherence to national guidelines and standards  
• Feedback of presentations to increase awareness of guidance |
| Be able to chair effectively clinical meetings involving parents, disabled children and other professionals | • Reflections of meetings chaired and management experience obtained  
• Use of ePaedsCbD to explore management strategies and techniques  
• Consider specific courses or training in management and leadership skills |
| Be able to work effectively with other committed colleagues in regional neurology clinical networks | • Reflection on local network meetings attended  
• Feedback from Paediatric Multisource feedback (ePaedMSF) to evaluate efficacy of involvement within the team |
### Section 3 Specific Clinical Competences in Paediatric Epilepsy

*By the end of Level 3 module in Paediatric Epilepsy, trainees will:*

<table>
<thead>
<tr>
<th>Competency</th>
<th>Potential methods used in order to demonstrate and achieve competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know the broadly normal patterns of skill acquisition for the following</td>
<td>• Reflections of cases encountered of children at varying developmental stages</td>
</tr>
<tr>
<td>areas in children from 0-19 years: language and communication; vision;</td>
<td>• ePaedMiniCEX focusing on developmental review</td>
</tr>
<tr>
<td>hearing; speech; cognition; behaviour; social communication mobility;</td>
<td>• Consider formal developmental assessment training</td>
</tr>
<tr>
<td>hand function; personal care/self-help skills; continence</td>
<td></td>
</tr>
<tr>
<td>Understand the principles of quantitative assessment of children’s</td>
<td>• Reflections of cases encountered of children at varying developmental stages</td>
</tr>
<tr>
<td>development and functioning</td>
<td>• Consider clinic attendances with Clinical Neuropsychology team</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Section 4 Practical Procedures and Investigations in Paediatric Epilepsy
### Practical Procedures and Investigations

**By the end of Level 3 module in Paediatric Epilepsy, trainees will:**

<table>
<thead>
<tr>
<th>Competency</th>
<th>Potential methods used in order to demonstrate and achieve competency</th>
</tr>
</thead>
</table>
| Know the indications for acute and non-acute neuroimaging in children and young people with epilepsies and how to interpret reports, including knowing when to seek further expert opinions on scan films, to get the best possible information from the investigation | • Reflections on attendance at Neuroradiology meetings  
• Reflections on cases encountered, exploring evidence-base and history of Neuroradiology in epilepsies  
• Reflections of relevant information obtained from educational meetings and workgroups |
| Know the indications and purpose for the individual child or EEG investigations standard EEG, sleep EEG, ambulatory and video EEG | • Attendance at Neurophysiology department and reflective log of cases encountered  
• Consider specific basic EEG course  
• Reflection on information obtained during Paediatric Epilepsy Training course and through BPNA distance learning module |
| Know the indications for metabolic and genetic investigations in children and young people with epilepsies | • Reflections of cases encountered and explore in more detail literature regarding metabolic and genetic disorders, relevant to Epilepsies  
• Consider joint genetic or metabolic clinic attendance and reflective log of cases encountered  
• Use of Clinical Questions to explore relevant disorders |
| Know how to interpret results of neuroimaging, neurophysiological, genetic and metabolic investigations and how to seek appropriate advice when uncertain | • Reflections of clinical cases encountered  
• Attendance at neuroradiology/genetic/metabolic clinics |
| Be able to explain scan pictures and EEG results to children, young people, parents and carers, pointing out and explaining any abnormalities, showing normal scan pictures for comparison where necessary | • Use of ePaedMiniCEX to explore communication skills  
• Reflection of cases encountered |
### Section 4 Practical Procedures and Investigations in Paediatric Epilepsy

#### Pharmacology and Therapeutics

*By the end of Level 3 module in Paediatric Epilepsy, trainees will:*

<table>
<thead>
<tr>
<th>Competency</th>
<th>Potential methods used in order to demonstrate and achieve competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be able to prescribe for the range of epilepsies, both on and off label</td>
<td>• Reflective log of clinical cases encountered</td>
</tr>
<tr>
<td>medications as appropriate, including being able to explain the</td>
<td>• Reflections on information obtained through PET courses and BPNA distance learning courses or educational meetings</td>
</tr>
<tr>
<td>implications of treatment (or not), side effects and potential adverse</td>
<td>• Reflection on discussions with children and their families regarding medication issues</td>
</tr>
<tr>
<td>interactions to children, young people and other relevant professionals</td>
<td>• Use of ePaedMiniCEX to explore communication skills and information provision</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Be able to understand the role of non-pharmacological treatments</td>
<td>• Reflection on cases and discussions with relevant healthcare specialists (e.g. dietician, surgeon)</td>
</tr>
<tr>
<td>including ketogenic diet, vagal nerve stimulation and epilepsy surgery</td>
<td>• Use of Clinical Questions to explore evidence-base behind non-pharmacological treatments</td>
</tr>
<tr>
<td>and be able to participate in the shared care of these children</td>
<td>• Discussions with families regarding their experiences in using various non-pharmacological treatments and reflections on advantages and limitations</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>