

**Appendix IV – Complexity of cases in Paediatric Neurology with examples**

(Supplement to Section 3.61 Case Profile)

Highly complex

Highly complex conditions are those that must be managed in a tertiary or quaternary centre. High level of expertise and experience are required in their care. Often the management involves the use of sophisticated interventions and investigations. Elaborate planning and input from multiple specialties are often required. In some situations the complexity lies in the diagnostic and therapeutic processes, where the diagnosis cannot be made easily or difficulty in treatment decision are encountered.

Examples: Doral rhizotomy candidates. Epilepsy surgery candidates requiring specialized investigative and evaluation techniques. Cerebral palsy and movement disorder patients requiring high end intervention e.g. deep brain stimulation, single event multilevel orthopaedic surgery, intrathecal baclofen. Neurological emergencies that requires PICU facilities e.g. status epilepticus, head injury, stroke, coma and acute encephalopathy. Rare neuromuscular, neurometabolic and neurogenetic diseases. CNS neoplasms. Complex neonatal neurological conditions e.g neonatal seizures.

Complex

Complex conditions are those that can be managed in tertiary setting. The cases are usually definitively diagnosed but treatment decisions are complex and require a high level of expertise. The condition is often chronic or associated with multiple co-morbidities. Input from other specialties as well as the paediatric neurologist is often required.

Examples: Cerebral palsy patients of poor Gross Motor Function Classification System (GMFCS) level. Intractable epilepsy. More common neurometabolic and neurogenetic diseases. Neurodegenerative diseases where the diagnosis was made. Autistic, ADHD and cognitively impairment children with co-morbidities. Neonatal neurological conditions like neonatal encephalopathy. Neuromuscular diseases like Spinal Muscular Atrophy, Duchenne Muscular Dystrophy.

Intermediate

Intermediate conditions are those that can be managed in secondary level setting. The diagnosis and management pathway have been established but ongoing management requires the constant supervision, evaluation and adjustments from paediatric neurologists.

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Examples: Cerebral palsy patients of intermediate GMFCS level, well controlled epileptic patient still receiving medications, simple neurobehavioral conditions without co-morbidity. Intractable or modified headaches.

### Simple

Simple conditions are those that can be managed in primary or secondary level setting. The condition is clearly diagnosed and management was effective, or that no management other than continuing surveillance is required.

Examples: Stable visual, hearing and cognitive impairment, episodic seizure disorders, primary headaches. Cerebral palsy patients of high GMFCS levels.

The examples listed in the above categories are not exhaustive and are only used to illustrate the general principle in dividing different neurological conditions into the four levels.