

## Levels of Neonatal Follow-Up Care

The levels of neonatal follow-up should follow/be paired with NICU Levels of Care. This reference sheet provides details regarding the Neonatal Follow-Up Levels of Care, including admission criteria, the goals of each level of follow-up and recommended resources.

Refer to the **List of Assessment Tools** document for details on assessment tools that can be used to achieve the goals of each level of follow-up.

Level I IIa IIb (Primary/ Community Care): Low risk of neuro-developmental impairment		
Admission Criteria	Goals	Recommended Resources
<ul style="list-style-type: none"> <li>GA 34+0-36+6 wks</li> <li>BW &gt;2000g</li> <li>BW &gt;3rd Percentile</li> <li>Healthy infants</li> <li>Uncomplicated neonatal course</li> <li>No history of maternal drug use <b>OR</b> some drug exposure but no withdrawal and do not get treatment</li> <li>Do not meet other criteria for regional or Level III follow-up</li> <li>Exposure to selective serotonin re-uptake inhibitors (SSRI) (mother should be encouraged to stay on medication and be monitored for depression)</li> </ul>	<ul style="list-style-type: none"> <li>All premature infants have the opportunity for early developmental screening</li> <li>All low risk babies get screened by 18-months</li> <li>Routine developmental care by primary care practitioner</li> </ul>	<ul style="list-style-type: none"> <li>Primary care physician/nurse practitioner or general pediatrician (for screening)</li> </ul> <p><b>Additional Notes:</b></p> <ul style="list-style-type: none"> <li>Level IIc NNFU consult is available for early concerns in infants under 8 months.</li> <li>Referral to a paediatric consultant, to children's treatment centres or early intervention can be made depending on age and available resources.</li> <li>Those with complex developmental issues that cannot be adequately assessed or who require multidisciplinary consultation could be considered for referral to a Level IIC and/or Level III NNFU.</li> </ul>
Level IIc (Regional): Low-moderate risk of neuro-developmental impairment		
Admission Criteria	Goals	Recommended Resources
<ul style="list-style-type: none"> <li>GA &gt;30+0 to 33+6wks</li> <li>BW &lt;3rd percentile or Head Circ &lt;3rd percentile</li> <li>Hyperbilirubinemia exchange transfusion level</li> <li>Symptomatic Hypoglycemia &lt;2.2mmol/l over 6 hours, requiring intensive care monitoring and treatment.</li> <li>Intrauterine death of one twin (if surviving twin is &lt;36+6wks GA)</li> <li>Maternal drug use/Neonatal Abstinence Syndrome (NAS) requiring pharmacological treatment</li> <li>Meningitis, not requiring Level III care</li> <li>Multiples ≥ 3, &gt;30wks GA</li> <li>Perinatal acidosis (pH&lt;7 plus or Apgar &lt;5 @ 10mins)</li> <li>Sarnat Level 1/Mild neonatal encephalopathy or Level 2 encephalopathy that does not require Level III NICU</li> <li>Periventricular leukomalacia &gt;30wks GA, up to and including term</li> </ul>	<ul style="list-style-type: none"> <li>Screening, diagnosis, education, coaching (not intervention/treatment/traditional therapy),</li> <li>Linkage/referral/facilitation to community services, medical subspecialties, therapeutic interventions</li> </ul>	<ul style="list-style-type: none"> <li>Access to a physician/ pediatrician knowledgeable in early childhood development</li> <li>Access to therapy support such as a motor-based therapist or interdisciplinary team, i.e. OT, PT, SLP, RN</li> </ul> <p><b>Additional Notes:</b></p> <ul style="list-style-type: none"> <li>Focus on early assessment and major morbidities: <ul style="list-style-type: none"> <li>Vision</li> <li>Hearing</li> <li>Cerebral Palsy/ Gross Motor Impairment</li> <li>Cognitive Impairment/ Global Developmental Delay</li> <li>Autism Spectrum Disorder</li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>• Seizures – Any neonatal seizure</li> <li>• Twin-to-twin transfusion syndrome – requiring laser ablation, born between 30+0 to 36+6 wks GA</li> <li>• Moderate/late pre-term infant failing to establish full oral feed at term equivalent</li> </ul>		
<b>Level IIIa (Tertiary): Moderate-High risk of neuro-developmental impairment</b>		
<b>Admission Criteria</b>	<b>Goals</b>	<b>Recommended Resources</b>
<ul style="list-style-type: none"> <li>• GA &lt;30 wks gestation</li> <li>• BW &lt; 1250g</li> <li>• Bronchopulmonary dysplasia– oxygen dependence / respiratory support at 36 wks corrected GA</li> <li>• Hypoxic ischemic encephalopathy Sarnat Level 2 or 3/Moderate or severe encephalopathy</li> <li>• Therapeutic hypothermia</li> <li>• Intraventricular hemorrhage ≥ Grade III</li> <li>• Meningitis – Fungal or Bacterial (excluding staph epidermis) requiring Level 3 support</li> <li>• Necrotizing enterocolitis requiring surgery or penrose drain</li> <li>• Neonatal stroke</li> <li>• Periventricular leukomalacia &lt;30 wks</li> <li>• Twin-to-twin transfusion syndrome – requiring laser ablation, born at &lt;30 wks GA</li> <li>• Viral encephalitis requiring Level III NICU care</li> <li>• Other: Based on site specific capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Developmental surveillance, screening and assessment</li> <li>• Diagnosis and intervention (referral, coaching, etc.)</li> <li>• Education</li> <li>• Research</li> </ul>	<ul style="list-style-type: none"> <li>• Developmental pediatrician/ pediatrician, neonatologist, nursing, therapists, psychologist, and potentially a psychometrist with expertise in early childhood and a behavioural therapist.</li> </ul> <p><b>Additional Notes:</b></p> <ul style="list-style-type: none"> <li>• Additional resources/ subspecialty consultations as needed</li> <li>• This level includes extreme-pre-terms and those Children at risk of school-aged issues/ learning disabilities Comprehensive assessments at 18-months and school age</li> <li>• Ability to collaborate with Level III providers</li> </ul>
<b>Level IIIb/ Children’s Hospital (Quaternary): Moderate-High risk of neuro-developmental</b>		
<b>Admission Criteria</b>	<b>Goals</b>	<b>Recommended Resources</b>
<ul style="list-style-type: none"> <li>• Congenital diaphragmatic hernia</li> <li>• Omphalocele</li> <li>• Cyanotic congenital heart disease requiring pump or extracorporeal membrane oxygenation within the neonatal period</li> <li>• Extracorporeal membrane oxygenation</li> <li>• Children with medical complexity ≥ 3 subspecialists involved</li> </ul>	<ul style="list-style-type: none"> <li>• Same as Level IIIa</li> <li>• Linkage with sub-specialty services</li> </ul>	<ul style="list-style-type: none"> <li>• Sub-specialists</li> <li>• Interdisciplinary team associated with the diagnoses</li> </ul>

## Glossary

BW	Body Weight
GA	Gestational Age
NICU	Neonatal Intensive Care Unit
NNFU	Neonatal Follow-Up
OT	Occupational Therapist
PT	Physiotherapist
RN	Registered Nurse
SLP	Speech Language Pathologist
SSRI	Selective Serotonin Re-uptake Inhibitors