### Competency Based Goals and Objectives:

**Goal 1:** Understand antepartum factors that contribute to the need for pediatric attendance at deliveries, impact on neonatal health. (PGY1, 3)

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<thead>
<tr>
<th>Resident Objectives:</th>
<th>Instructional Strategies</th>
<th>Evaluation</th>
<th>ACGME Competency Goals</th>
</tr>
</thead>
</table>
| 1. Review maternal charts at attended deliveries | • Clinical cases  
• Case conferences | • Discussion with hospitalist at delivery  
• Medhub | MK – demonstrate an investigatory and analytic thinking approach to clinical situations.  
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics  
PC - Gather essential and accurate information about their patients |
| 2. Describe how to act on abnormal maternal prenatal labs (RPR+, RNI, HepB+, HIV+, GC/CT+, HSV+) | • Review Red Book entry on each entity  
• Clinical cases  
• Case conferences | • Medhub  
• Post-assessment | MK – demonstrate an investigatory and analytic thinking approach to clinical situations.  
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics |
| 3. Generate a differential diagnosis of fetal and maternal factors that contribute to oligohydramnios and polyhydramnios | • Read relevant excerpts from Williams Obstetrics  
• Clinical cases  
• Case conferences | • Attending/Fellow discussion & evaluation in Medhub | MK – demonstrate an investigatory and analytic thinking approach to clinical situations.  
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics |
| 4. Explain treatment of PIH and impact of maternal magnesium sulfate therapy on infant | • Williams Obstetrics  
• Clinical cases | • Attending/Fellow discussion  
• Medhub | MK – demonstrate an investigatory and analytic thinking approach to clinical situations.  
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics |
| 5. Understand the complications of multiple gestation pregnancy | • Williams Obstetrics  
• Clinical cases | • Attending/Fellow discussion  
• Medhub | MK – demonstrate an investigatory and analytic thinking approach to clinical situations.  
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics |
| 6. Define indications for antenatal steroids | • Clinical cases  
• Read ACOG Consensus statement 2009 | | MK – demonstrate an investigatory and analytic thinking approach to clinical situations.  
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics |
### Resident Objectives:

1. **Demonstrate knowledge of intrapartum risk factors for early-onset neonatal sepsis (GBS, PPROM, PROM, Chorio)**
   - Clinical cases
   - Case conferences
   - Read CDC guidelines for intrapartum GBS prophylaxis and management of chorioamnionitis
   - NICU Guide, Sepsis chapter
   - Attending/Fellow discussion
   - Medhub

2. **List all three major neonatal pathogens for early-onset sepsis and the appropriate antibiotic regimen.**
   - Review Red Book Reading on each entity
   - Clinical cases
   - Case conferences
   - Attending/Fellow/Hospitalist discussion
   - Medhub

3. **Describe the newborn exam findings consistent with breech presentation and shoulder dystocia; provide appropriate follow-up tests.**
   - Read the Practice Parameter for DDH in Infants
   - Clinical cases
   - Attending/Fellow/Hospitalist discussion
   - Medhub

4. **Differentiate caput seccundum, cephalohematoma, and subgaleal hematoma, describing the anatomical differences between and implications of these findings.**
   - Directed reading: Nelson’s or Zitelli’s
   - Physical Exam findings with Hospitalists, Fellows and Attendings
   - Attending/Fellow/Hospitalist discussion
   - Medhub

### ACGME Competency Goals

- **MK** – demonstrate an investigatory and analytic thinking approach to clinical situations.
- **MK** - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics

**GOAL 2: Understand intrapartum risk factors that may impact a newborn’s health.**

- **Instructional Strategies**
  - Williams Obstetrics
  - Clinical cases

- **Evaluation**
  - Attending/Fellow discussion
  - Medhub

- **PC** - Gather essential and accurate information about their patients
- **PC** - Perform complete and accurate physical examinations

- **MK** - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics

- **MK** - Demonstrate an investigatory and analytic thinking approach to clinical situations.
- **MK** - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics
- **PC** - Perform complete and accurate physical examinations
5. Review fetal heart tracings and distinguish early, late and variable decelerations.

- Directed readings Williams Obstetrics
- Review tracings on delivery room patients
- Attending/Fellow/Hospitalist discussion
- Medhub

MK – Demonstrate an investigatory and analytic thinking approach to clinical situations.
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics

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<tr>
<th>GOAL 3: Be competent in neonatal resuscitation techniques and understand indications for non-resuscitation.</th>
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<td><strong>Resident Objectives:</strong></td>
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<tr>
<td>1. Operate optimally in a team to resuscitate an infant.</td>
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<td>2. Recite the NRP algorithm for neonatal resuscitation, including indications for intubation and medications</td>
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<td>3. Know the delivery room management for infants born through meconium stained fluid.</td>
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<td>4. Evaluate the gestational age of an infant using physical exam findings.</td>
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<td>6. Describe the NRP indications and legal requirements for resuscitation and non-resuscitation of infants as well as discontinuation of resuscitative efforts.</td>
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<th>GOAL 4: Understand in-hospital morbidities and long term outcomes of infants born prematurely.</th>
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1. Define respiratory distress syndrome, including clinical presentation and X-Ray findings, indications for surfactant therapy. Define BPD/chronic lung disease according to various definitions (VON, NICHD/NRN)

- Clinical Cases
- Radiology Rounds
- Case conferences
- NICU Guide for surfactant clinical protocol
- Review NICU Guide BPD chapter
- Review key articles (Walsh MC paper)
- Attending/Fellow discussion
- Post assessment

MK – demonstrate an investigatory and analytic thinking approach to clinical situations.
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics
PC - Perform complete and accurate physical examinations

2. Categorize the various degrees of intraventricular hemorrhage and subsequent impact on neurodevelopmental outcomes.

- Radiology Rounds
- Clinical Cases
- NICU Guide IVH chapter
- Review the Papile article
- Review the Laptook article
- Review the Broitman article
- Attending/Fellow discussion
- Post-assessment

MK – Demonstrate an investigatory and analytic thinking approach to clinical situations.
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics

3. Know the indications and timing for ROP screenings.

- Review Pediatrics article on ROP.
- Clinical cases
- NICU Guide ROP chapter
- Attending/Fellow discussion

MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics

4. Recognize the clinical symptoms of a patent ductus arteriosus, the diagnostic evaluation, and indications for medical and surgical management.

- NICU Guide PDA chapter
- Clinical Cases with treatment versus observation approach
- Radiology and Cardiology rounds
- Attending/Fellow discussion

MK – Demonstrate an investigatory and analytic thinking approach to clinical situations.
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics
PC - Perform complete and accurate physical examinations

**Goal 5: Understand complications unique to term infants.**

<table>
<thead>
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<tbody>
<tr>
<td>1. Describe indications for inhaled nitric oxide or extracorporeal membrane oxygenation to treat persistent pulmonary hypertension.</td>
<td>NICU Guide PPHN/iNO Chapters</td>
<td>Attending/Fellow discussion</td>
<td>MK – Demonstrate an investigatory and analytic thinking approach to clinical situations. MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics</td>
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</table>
2. Describe the criteria used to determine eligibility for systemic hypothermia as a treatment for neonatal encephalopathy.

- NICU Guide HIE/Cooling chapter
- Review Shankaran article (NEJM 2005)
- Attending/Fellow discussion

MK – Demonstrate an investigatory and analytic thinking approach to clinical situations.
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics

3. Recognize the clinical presentation and initiate appropriate management of an infant with suspected metabolic disorder.

- NICU Guide Hyperammonemia chapter
- Clinical cases.
- Case Module
- Attending/Fellow discussion
- Post-assessment

MK – demonstrate an investigatory and analytic thinking approach to clinical situations.
MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics
PC - Perform complete and accurate physical examinations

Goal 6: Become comfortable identifying and initiating management for surgical emergencies in the newborn.

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<tbody>
<tr>
<td>1. Recognize the clinical presentations of various surgical emergencies (NEC, malrotation, Imperforate anus, TEF, CDH, myelomeningocele)</td>
<td>Gomella Neonatology</td>
<td>Attending/Fellow discussion</td>
<td>MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics PC - Perform complete and accurate physical examinations</td>
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<td>Relevant NICU Guide chapters</td>
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<td>Clinical Cases</td>
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Goal 7: Be able to recognize the physical findings and pathology associated with common congenital anomalies.

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<tbody>
<tr>
<td>1. Recognize the physical exam findings in most common chromosomal abnormalities (T13, T18, T21, 22q11)</td>
<td>Review Smith’s description of each of these anomalies.</td>
<td>Attending/Fellow discussion</td>
<td>MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics PC - Perform complete and accurate physical examinations</td>
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<td>Review NICU Guide Genetics section</td>
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<td>Attend Case Conferences</td>
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<td>Clinical Cases</td>
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<td>Genetics rounds</td>
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2. Recognize the physical exam in non-chromosomal syndromes such as VACTERL, CHARGE, VCF, Fetal Alcohol Syndrome

- Review Smith’s description of these.
- Clinical cases
- Genetics rounds
- Physical Exam findings with Fellow and Attendings.
- Attending/Fellow discussion

MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics PC - Perform complete and accurate physical examinations
3. Distinguish the clinical presentation between cyanotic and acyanotic congenital heart disease. List the 5 main types of cyanotic heart disease.

- Suggested reading: Long-Fetal and Neonatal Cardiology and text by Myung Park
- Review NICU Guide CHD section
- Review indications for hyperoxia test and pre/post ductal sats on hypoxic infant.
- Attending/Fellow discussion

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<tr>
<th>Goal 8: Appreciate the complexities of caring for a former premature or critically ill patient upon leaving the hospital and recognize the planning and support required for a safe discharge.</th>
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<td><strong>Resident Objectives:</strong></td>
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<tr>
<td>1. Design a discharge plan in cooperation with attending MD and case managers.</td>
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<td>2. Provide appropriate communication to receiving physician or private pediatrician for an infant being discharged from LPCH.</td>
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<th>Goal 9: Develop communication skills with parents and families in the NICU</th>
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<tr>
<td><strong>Resident Objectives:</strong></td>
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<tr>
<td>1. Provide daily management plan updates to parents.</td>
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2. Participate in care conferences.  • Observe and reflect on effective communication modeled by other providers.  • Attending/fellow feedback

PBLI - Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems
ICS - Communicate effectively with patients, families, and the public as appropriate, across a broad range of socioeconomic and cultural backgrounds;

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<th>Goal 10: Refine supervisory and teaching skills (PGY 3)</th>
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<tbody>
<tr>
<td>Resident Objectives: Provide daily management plan updates to parents. (PGY 1, 3)</td>
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<td>--------------------------------------------------------</td>
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</tbody>
</table>
| 1. Provide daily management plan updates to parents. (PGY 1, 3) | • Role modeling and suggestions from senior resident/fellow. | • Ancillary staff feedback.  • Attending/senior resident feedback. | PBLI Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems  
P - Respect for patient privacy and autonomy  
ICS - Communicate effectively with patients, families, and the public as appropriate, across a broad range of socioeconomic and cultural backgrounds; |

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<tr>
<th>2. Prepare and present talk once weekly to interns and medical students on such topics as (jaundice, ALTE, fluid management, TPN).</th>
<th>Instructional Strategies</th>
<th>Evaluation</th>
<th>ACGME Competency Goals</th>
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</table>
| 2. Prepare and present talk once weekly to interns and medical students on such topics as (jaundice, ALTE, fluid management, TPN). | • Talk to be observed by Fellow or Attending | • Observer comments on talk  • Attending/fellow/ feedback | MK - Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics  
PBLI - Participate in the education of patients, families, students, residents and other health professionals |

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<tr>
<th>3. Provide weekly feedback and support to interns and medical students regarding workflow efficiency and oral presentations.</th>
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<th>Evaluation</th>
<th>ACGME Competency Goals</th>
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</table>
| 3. Provide weekly feedback and support to interns and medical students regarding workflow efficiency and oral presentations. | • Experiential learning by providing feedback and reflecting on experience | • Peer Evaluation | PBLI - Incorporate formative evaluation feedback into daily practice  
PBLI - Set learning and improvement goals |