In addition to a specialized feeding program and complex respiratory program, Good Shepherd Rehabilitation Hospital (GSRH) Pediatric Unit offers specialized services for Neonatal Intensive Care Unit (NICU) graduates and medically-complex newborns.

Infants requiring auto-regulation intervention, developmental facilitation or family education for transition home can benefit from Good Shepherd’s comprehensive rehabilitation.

**Auto-Regulation**

One of the biggest challenges that NICU infants have to overcome during the early phase of their stay in a rehabilitation unit is the lack of ability to calm themselves during therapeutic activities. Many babies demonstrate various degrees of irritability when they are subjected to sensory stimuli, such as music, light, textures and taste, or when they are placed in various positions, such as prone, side lying and supine.

For these patients to acquire age-appropriate skills, they need to learn how to react to various stimuli and situations positively. Good Shepherd’s clinical team members strive to create a pleasant experience when introducing new sensory input or new positions and activities.

Initially, treatments will be limited to the patient’s room under low lighting with silence or low, soothing music. As infants show increased tolerance, therapies may be moved to another room with normal lighting using auditory toys, and, eventually, activities may be performed in a more communal area within the unit.
**Case Studies**

**Patient #1 – Born at 26-weeks gestation, surviving twin**

**Length of stay: 90 days**

Patient displayed: extreme low birth weight, multiple medical complications, high risk for developmental delay, retinopathy of prematurity with loss of vision, chronic lung disease and severe GI reflux, severe oral aversions, uncoordinated suck-swallow, dependent on gastrostomy feedings.

The patient was referred to GSRH Pediatric Unit for developmental facilitation in order to foster age-appropriate skills, increase strength and endurance, provide sensory stimulation, intensive feeding therapy to reduce need for supplemental nutrition and intensive family education.

**Outcomes:**
- Occasional need for supplemental oxygen with acute respiratory illness (due to chronic lung disease)
- Hypertension resolved – off medications
- Oral intake improved. The patient is eating by mouth during day, taking thickened formula via spoon and has gastrostomy feedings at night. Video swallow showed mild dysphagia.
- Improved self-regulation, psychosocial skills and improved strength
- Able to tolerate prone and sitting positions, developmental facilitation
- Family education completed. Referred for ongoing outpatient therapy services, home health nursing and early intervention services.

**Patient #2 – Born at full-term**

**Length of Stay: 16 days**

Patient was exposed to IV drugs in utero and was positive for cocaine at birth. Patient was treated for neonatal abstinence syndrome in acute setting with morphine, methadone and phenobarbital. Patient had GE reflux with GJ tube placed for supplemental feedings.

Patient was referred to GSRH Pediatric Unit for continued medication weaning, improvement of oral-motor function, developmental facilitation and caregiver education.

**Outcomes:**
- Complete PO feedings, weaned from need for GJ tube supplementation
- Completed wean of morphine
- Resolution of seborrheic dermatitis
- Education of medical foster parents completed
- Referred to Early Intervention for ongoing services

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To make a referral or for inquiries, call 484-788-5492.

[www.GoodShepherdRehab.org](http://www.GoodShepherdRehab.org)

2855 Schoenersville Road, Bethlehem, PA 18017