This program strives to develop Pediatric Intensive Care trainees into skilled clinicians and future leaders in the field. The robust academic structure, combined with exposure to a wide spectrum of pediatric illnesses, ensures that trainees acquire both in-depth cognitive knowledge and hands-on proficiency in the procedural skills essential for managing critically ill children.

During the course, fellows may be posted in diverse critical care settings, including the Pediatric Intensive Care Unit (PICU), the pediatric emergency department, and the pediatric cardiac ICU. Simulation-based learning is an integral part of the curriculum, with regular simulation courses and workshops designed to enhance crisis management skills.

*Duration & Course Content*: This structured training spans **three months** and focuses on the pathophysiology and management of common and complex critical illnesses, including:

* Pediatric Acute Respiratory Distress Syndrome (ARDS)
* Mechanical ventilation, including high-frequency oscillatory ventilation (HFOV)
* Septic shock
* Super-refractory status epilepticus with neuroprotective measures
* Acute kidney injury and renal replacement therapy (SLED/CRRT)
* Acute liver failure
* Therapeutic plasma exchange
* Extracorporeal life support (ECLS/ECMO)

**Eligibility:** Applicants must have completed a minimum of **three years of pediatric training after their MBBS degree.**

**About Pediatric Critical Care at CMC Vellore:**

Pediatric Critical Care at Christian Medical College (CMC), Vellore, comprises a **31-bedded unit**, including a 13-bed high-dependency unit and a newly established 7-bed specialized PICU at the Ranipet campus. The unit manages over **2,500 admissions annually**, with approximately **900 children requiring mechanical ventilation**, including 450 on non-invasive support.

Advanced intensive care services provided include:

* High-frequency oscillatory ventilation (HFOV)
* Renal replacement therapies (SLED/CRRT)
* Extracorporeal life support (ECLS/ECMO) for children with severe cardiorespiratory failure

While the majority of patients are admitted for acute medical illnesses, approximately **25% are surgical cases**, including pediatric renal and liver transplants. Additionally, about **175 complex congenital cardiac surgeries** are performed each year, with postoperative care jointly managed by the cardiothoracic and PICU teams.