The proven effectiveness of Comprehensive Pediatric Hematology/Oncology Programs has demonstrated the need for a multidisciplinary team approach. Because of the unique nature of the disorders as well as the special medical and psychosocial requirements of children and young adults, the following services should be required for a Comprehensive Pediatric Hematology/Oncology Program. These guidelines do not imply the need for all personnel and services to necessarily be on-site. In many situations, although initial diagnosis and treatment planning may be done by a Comprehensive Pediatric Hematology/Oncology Program, it will be desirable to develop outreach services to bring much of the care as close to the patient’s home as is possible while maintaining state-of-the-art medical care.

**The following personnel and services are required to be On-Site at the facility:**

**On-Site Personnel (required):**
1. Board certified/eligible or equivalent pediatric hematologist/oncologist
2. Board certified pathologist(s) committed to handling specimens according to COG protocols
3. Nurses with additional training in the management of children and adolescents with cancer and blood disorders, and documented in-house training in chemotherapy administration
4. Clinical research associates trained in data management support of cooperative research (Please see CRA Handbook)
5. Respiratory therapists with expertise in pediatrics
6. Anesthesiologist with expertise in the management of children
7. Radiologist with expertise in the management of children
8. Pharmacist with expertise in chemotherapy
9. Social worker with additional training in the management of children and adolescents with cancer and blood disorders

**On-Site Services (required):**
1. Pediatric unit, i.e. personnel trained in taking care of children even if beds are in an adult unit
2. Intensive care unit with the ability to treat critically ill children
3. Outpatient clinic for the acute and chronic care and treatment of children and adolescents with cancer
4. Computed axial tomography
5. Ultrasonography
6. Pharmacy with capability of storage, accurate preparation, dispensing, and accounting for investigational drugs, and other antineoplastics

7. Anatomic pathology services necessary for the immediate handling of specimens:
   - Ability to perform and interpret rapid frozen sections
   - Ability to rapidly freeze specimens for storage

Laboratory services necessary for the care of critically ill children that must be available 24 hours a day:
   - Ability to perform routine blood gas, clinical chemistry, hematology and coagulation assays on small samples
   - Availability of therapeutic apheresis
   - Immediate interpretation of organism stains

8. Capabilities to provide appropriate isolation for patients with severe immunosuppression

9. Expertise available to determine the need to deliver and monitor total parenteral nutrition for critically and chronically ill children and adolescents

10. Pain management and sedation guidelines

11. Long term follow-up services for survivors of pediatric cancer

12. Data collection and transfer systems to support clinical trials programs:
   - Internet access at the institution
   - Individual email accounts for all COG members
   - At minimum, Windows XP (or Mac), 64 MB RAM, 15” monitor, access to a printer
     (Note: These are minimum information technology requirements. Macintosh systems are acceptable, although PCs with 64 MB RAM and 17” monitors are strongly recommended with connection speeds > 256.)

The facility must be able to document that they have the following personnel and services available and readily accessible:

1. Access to radiation therapy equipment designed for state-of-the-art treatment of children and adolescents including rotational linear accelerator dedicated

2. Board certified/eligible or equivalent surgeon with expertise in the general surgical management of children and adolescents with cancer and blood disorders

3. Orthopedic surgeons with expertise in the management of children

4. Urologic surgeons with expertise in the management of children

5. Neurosurgeons with expertise in the management of children

6. Ophthalmologist with expertise in the management of children
7. Otolaryngologist with expertise in the management of children
8. Plastic surgeon with expertise in the management of children
9. Radiation oncologists with special expertise in the treatment of children and adolescents with cancer and blood disorders
10. Nuclear medicine physician with expertise in the management of children
11. Board certified pathologist with special training and/or certification in pediatric pathology
12. Board certified pathologist with special training and/or certification in hematopathology
13. Board certified pathologist with special training and/or certification in neuropathology
14. Nutritionist(s) with expertise in the dietary requirements of children and adolescents
15. Physical therapist(s) with expertise in pediatrics
16. Pediatric psychologist(s) with additional training in the management of children and adolescents with cancer and blood disorders
17. Occupational therapist(s) with expertise in pediatrics
18. Child Life specialist
19. Nephrology
20. Pulmonology
21. Cardiology
22. Dentistry
23. Gastroenterology
24. Neurology
25. Infectious disease
26. Endocrinology
27. Psychiatry

**Accessible Services (required):**

1. Diagnostic imaging and radiation oncology equipment and services, including:
   - Magnetic resonance imaging
   - PET Scan
   - Nuclear medicine
   - Angiography
   - Interventional radiology
   - Rotational linear accelerator
   - Dedicated radiation similator or CT simulator
• Treatment planning system capable of doing multiple point calculations on irregular fields
• Adequate physics support for calibration, dosimetry, and regular quality assurance
• Anesthesia resources to meet the sedation/anesthesia needs of pediatric patients
• Agree to be surveyed by the RPC (Radiologic Physics Center) and to submit data including benchmarks to QARC

2. CLIA approved (or equivalent) Clinical laboratories with expertise in the assessment and diagnosis of pediatric hematologic/oncologic disorders offering:
   • Cell marker studies
   • Bone marrow aspirate and biopsy analysis
   • Histopathology
   • Cytogenetic analysis
   • Immunohistochemistry for tumor diagnosis
   • Comprehensive microbiology and virology
   • Clinical chemistry expertise in monitoring antibiotic and methotrexate levels

   Laboratory services necessary for the care of critically ill children that must be available 24 hours a day:
   • Transfusion service that can supply leukocyte reduced, irradiated cellular products appropriate for immunocompromised patients
   • Therapeutic apheresis
   • Transfusion program for the efficient and safe administration of blood products to ambulatory patients

3. Services for dialysis of children and adolescents
4. Rehabilitation

In addition to these requirements, Comprehensive Pediatric Hematology/Oncology Programs should have regularly scheduled multidisciplinary tumor boards as well as case conferences designed to discuss children and adolescents with serious hematologic problems. The outpatient clinic should ensure the long-term follow-up of successfully treated patients and those with lifelong chronic disorders.
Comprehensive Pediatric Hematology/Oncology Programs must be affiliated with or part of a hospital and laboratory approved for the care of children and adolescents by the JCAHO or equivalent.

Group Administrator: Joan Madden-Ceballos

8/05/05
6/08-added PET Scan