

**Levels of Care - Impact Assessment**

**Treatment Phase of Care**

**District Health Authority: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Hospital: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Assessed Level of Care for**

**Treatment Phase of Care**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Completed by:**

**DHA designate:**

**Date:**

**Contact Information:**

|  | Required | | | Recommended | | | Action / Comments |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Full** | Partial | No congruence | **Full** | Partial | No congruence |  |
| **BASIC CENTER REQUIREMENTS** | **F** | **P** | **N** | **F** | **P** | **N** |  |
| Safe, child friendly area to isolate child from nosocomial infections [ED/ambulatory care] |  |  |  |  |  |  |  |
| A family physician or pediatrician in the home community willing to manage the care of a child/adolescent with cancer or a serious haematological disorder in collaboration with the pediatric hem/onc such as managing the side-effects or complications or oral-chemotherapy, and being able to recognize common chemotherapy related toxicities |  |  |  |  |  |  |  |
| Health professionals able to provide pediatric care and monitoring such as immunizations, subcutaneous injections, insertion of nasogastric tube, GCSF administration and vital signs monitoring. |  |  |  |  |  |  |  |
| Emergency Department with 24/7 physician and nurse coverage, and basic pediatric resuscitation to initiate treatment or stabilize patient and arrange for transfer as necessary. |  |  |  |  |  |  |  |
| Health and/or psychosocial professionals able to provide family support and assist with arrangements for transfer as required. |  |  |  |  |  |  |  |
| Ready access to pharmacy with antibiotics, anti-emetics, pain medications and other drugs required for provision of basic level care. |  |  |  |  |  |  |  |
| Able to obtain appropriate blood samples, including micro-samples and peripheral venous blood from children and transport blood samples to lab for testing if not available on site. |  |  |  |  |  |  |  |
| Able to do urine dipstick or urinalysis |  |  |  |  |  |  |  |
| Health professionals with commitment to ongoing education applicable to level of care, [i.e. patient specific, “just-in-time” education.] |  |  |  |  |  |  |  |
| Primary contact able to forward necessary documentation to the tertiary centre |  |  |  |  |  |  |  |
| Ready access to pediatrician referral and access to contact numbers at Sub Specialty centre for; ED, Clinic, Inpatient unit and Pediatric hematologist/oncologist |  |  |  |  |  |  |  |

|  | Required | | | Recommended | | | Action / Comments | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Full** | Partial | No congruence | **Full** | Partial | No congruence |  | |
| **INTERMEDIATE CENTER REQUIREMENTS**  **\*Must also meet all basic center requirements** | **F** | **P** | **N** | **F** | **P** | **N** |  | |
| Pediatric Inpatient unit (may be shared) with isolation rooms |  |  |  |  |  |  |  | |
| Controlled quiet environment for chemotherapy administration |  |  |  |  |  |  |  | |
| A pediatrician (or GP in certain circumstances) able to manage the care of a child/adolescent with cancer or a serious hematologic disorder in collaboration with a pediatric hematologist/ oncologist.  This includes supervision of chemotherapy administration and provision of onsite or immediate response for agents with risk of hypersensitivity reactions and/or extravasation. |  |  |  |  |  |  |  | |
| Nurses with competencies to access CVADs 24/7 |  |  |  |  |  |  |  | |
| Nurses with APPHON-RROHPA established competencies to care for this patient population at the Intermediate level. |  |  |  |  |  |  |  | |
| Pharmacy available on site with access to intermediate level antineoplastic and supportive agents |  |  |  |  |  |  |  | |
| Class II biological hood externally vented, chemo precautions equipment; chemo spill kit readily available; appropriate pumps for chemotherapy administration; rapid access to resuscitation, anaphylaxis and extravasation treatment drugs and equipment |  |  |  |  |  |  |  | |
| Pharmacists on site with expertise and understanding of chemotherapy and treatment protocols/ roadmaps, able to provide chemotherapy order verification. |  |  |  |  |  |  |  | |
| Pharmacist/s or pharmacy technician/s, competent in safe handling, preparation, dispensing and disposal of chemotherapy agents. |  |  |  |  |  |  |  | |
| Pharmacists and/or nurses able to provide drug information, monitoring, clinical support and patient teaching. |  |  |  |  |  |  |  | |
| All nurses giving Chemotherapy to this population to have completed the APHON Pediatric Chemotherapy Biotherapy Provider Course |  |  |  |  |  |  |  | |
| Access to social worker and/or psychologist |  |  |  |  |  |  |  | |
| Dietitian able to provide nutritional assessment, monitoring and support, including enteral feeds, in liaison with tertiary dietician. |  |  |  |  |  |  |  | |
| Access to an occupational, respiratory and physio therapists able to provide care in collaboration with the Sub-Specialty centre. |  |  |  |  |  |  |  | |
| DI: equipment and personnel able to obtain and interpret ECGs, chest x-rays, abdominal films and Ultra-sounds - able to adjust to deliver lower doses of radiation for diagnostic imaging tests to pediatric patients |  |  |  |  |  |  | |  |
| Able to transmit ECG images to Sub Specialty centre. |  |  |  |  |  |  | |  |
| Lab: CBC/diff, BUN, Na, K, Creat, gluc stat [within 1 hour]; PT PTT, Fibrinogen test results within two days; uric acid, Ca, Phos Mg, AST, ALT, bili T/D, amylase within 24 hours; creatinine clearance. |  |  |  |  |  |  | |  |
| Microbiology: aerobic and anaerobic bacterial cultures. |  |  |  |  |  |  | |  |
| Blood bank: FFP, CMV safe, irradiated PRBC onsite; access to cryo and on site if caring for at risk patient; CMV safe irradiated platelets within 24 hrs; factor concentrates, IVIG, VZIG. |  |  |  |  |  |  | |  |
| Primary contact able to forward necessary documentation to the tertiary centre |  |  |  |  |  |  | |  |
| All Chemotherapy orders originate at the Sub-Specialty Centre |  |  |  |  |  |  | |  |
| Able to provide Institutional policies for oral and parenteral chemotherapy ordering, preparation administration, disposal, management of spills etc. even if they are borrowed from another institution |  |  |  |  |  |  | |  |
| Local Institutional policies for oral and parenteral chemotherapy ordering, preparation administration, disposal, management of spills etc. |  |  |  |  |  |  | |  |

|  | Required | | | Recommended | | | | Action / Comments | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Full** | Partial | No congruence | **Full** | Partial | | No congruence |  | |
| **ADVANCED CENTER REQUIREMENTS**  **\*Must also meet all intermediate center requirements** | **F** | **P** | **N** | **F** | **P** | | **N** |  | |
| Pediatric inpatient unit with isolation rooms [dedicated pediatric unit preferred] |  |  |  |  | |  |  |  | |
| Intensive Care Unit able to stabilize critically ill child/adolescent for transportation to a Sub-Specialty Centre |  |  |  |  | |  |  |  | |
| Pediatricians prepared to manage the care of a child with cancer or a serious hematologic disorder in collaboration with a pediatric hematologist/ oncologist. This includes:  -Preventing common complications and treating oncologic emergencies such as metabolic disturbances or hemorrhagic complications, etc. |  |  |  |  | |  |  |  | |
| Pediatrician on call 24/7 |  |  |  |  | |  |  |  | |
| Pediatrician able to administer Intra-thecal chemotherapy (IT) using procedural sedation service provided by an anesthetist. |  |  |  |  | |  |  |  | |
| Nurses with the APPHON-ROHPPA established competencies to care for this patient population at the advanced level. |  |  |  |  | |  |  |  | |
| All Nurses giving Advanced chemotherapy to this population to have the APHON Pediatric Chemotherapy and Biotherapy Provider Course |  |  |  |  | |  |  |  | |
| On-site pharmacy with advanced level antineoplastics and supportive agents. |  |  |  |  | |  |  |  | |
| On-site pharmacist/s able to provide monitoring and consultation about the treatment plan, in collaboration with the Sub-Specialty Centre |  |  |  |  | |  |  |  | |
| Social worker and/or psychologist available to provide support at diagnosis and regular follow-up if required. |  |  |  |  | |  |  |  | |
| Child Life Specialist (recommended for Holistic Care) |  |  |  |  | |  |  |  | |
| Dietitian with applicable expertise able to provide nutritional assessment, monitoring and support, including parenteral feeds |  |  |  |  | |  |  |  | |
| Access to respiratory therapist with pediatric expertise/ experience |  |  |  |  | |  |  |  | |
| Access to occupational therapist and physiotherapist with pediatric experience. |  |  |  |  | |  |  |  | |
| Diagnostic Imaging: nuclear medicine facilities for GFR [or creatinine clearance], WMEF [or echocardiogram]; experienced in pediatric CT scanning, able to adjust dosage for pediatric patients. |  |  |  |  |  | |  |  |
| Lab: access to bacterial culture on site and a process for timely fungal culture results |  |  |  |  |  | |  |  |
| Blood Bank: access to CMV safe irradiated platelets for transfusion with 12 hours. |  |  |  |  |  | |  |  |
| Experience and education applicable to advanced level of care. |  |  |  |  |  | |  |  |

|  | Required | | | Recommended | | | | Action / Comments |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Full** | Partial | No congruence | **Full** | Partial | | No congruence |  |
| **SUB-SPECIALTY CENTER REQUIREMENTS**  **\*Must also meet all advanced center requirements** | **F** | **P** | **N** | **F** | **P** | | **N** |  |
| In-patient and ambulatory care areas with isolation and reverse isolation capabilities |  |  |  |  |  | |  |  |
| Pediatric Emergency Department services with 24/7 pediatric resuscitation equipment available on- site |  |  |  |  |  | |  |  |
| Pediatric Intensive Care Unit; pediatric operating rooms |  |  |  |  |  | |  |  |
| Pediatric hematologist/oncologists, available 24/7 |  |  |  |  |  | |  |  |
| Pediatric sub-specialists in, anesthesiology, endocrinology, gastroenterology, genetics, immunology, infectious diseases, nephrology, neurology, rheumatology, rehabilitation, psychiatry, surgery, pain management. |  |  |  |  |  | |  |  |
| Radiation oncologists with pediatric expertise. |  |  |  |  |  | |  |  |
| Pediatric nurses with additional education and expertise in the management of children/adolescents with cancer or serious hematologic disorder [e.g. CNS and /or NPs] |  |  |  |  |  | |  |  |
| Nurses with the APPHON/RROHPA established competencies for the subspecialty level |  |  |  |  |  | |  |  |
| All Nurses giving Sub-Specialty chemotherapy to this population to have the APHON Pediatric Chemotherapy and Biotherapy Provider Course |  |  |  |  |  | |  |  |
| Clinical pharmacists with pediatric hem/onc expertise. |  |  |  |  | |  |  |  |
| Psychologist, social worker with pediatric hematology/onc expertise; |  |  |  |  | |  |  |  |
| Child life specialist (required for Holistic Care)**,** school intervention/education support personnel with pediatric hem/onc expertise |  |  |  |  | |  |  |  |
| Dieticians and dentists with pediatric hematology/oncology expertise. |  |  |  |  | |  |  |  |
| Occupational therapist, physiotherapist, respiratory therapist with pediatric hematology/oncology expertise. |  |  |  |  | |  |  |  |
| Physicians who are Clinical research associates with expertise in data management support of cooperative research and clinical trials |  |  |  |  | |  |  |  |
| Expertise in anti-neoplastic agents and therapies for serious hematologic disorders. Pharmacy capable of accurately and safely preparing, dispensing and documenting administration and disposal of investigational medications**.** |  |  |  |  | |  |  |  |
| Regularly held Tumour Boards to discuss treatment planning |  |  |  |  | |  |  |  |
| Membership in an international cooperative clinical trials group |  |  |  |  | |  |  |  |
| Access to radiotherapy equipment for state-of-art treatment of children, including rotational lineal accelerator, dedicated simulator |  |  |  |  | |  |  |  |
| Anaesthetic resources for procedural deep and conscious sedation services |  |  |  |  | |  |  |  |
| Access to hematopoietic stem cell transplant services, cytopheresis, plasmapheresis; dialysis. |  |  |  |  | |  |  |  |
| Diagnostic Imaging: all-inclusive nuclear medicine, MRI angiography; interventional radiology. |  |  |  |  | |  |  |  |
| Pediatric expertise in audiology, EEG, and ECG testing and interpretation. |  |  |  |  | |  |  |  |
| Lab: expertise in the assessment and diagnosis of pediatric hematology/oncology disorders including cell flow cytometry, bone marrow aspirate and biopsy histological analysis, immunohistochemistry, cytogenetic analysis, hemoglobinopathy diagnosis by protein and molecular methods, specialized coagulation testing, specialized analysis of immune function, microbiology/virology services and clinical chemistry expertise in monitoring antibiotic, antineoplastic and immunosuppressant drug levels, blood gas, routine chemistry, hematology and coagulation assays on small samples, immediate. interpretation of infectious organisms stains, histopathology |  |  |  |  | |  |  |  |
| Tertiary education qualifications and maintenance of ongoing education; support of educational endeavours for other health professionals as needed. |  |  |  |  | |  |  |  |
| Established community links. Designated contact persons for all involved disciplines; able to forward necessary communication to appropriate health professional in the community in timely manner |  |  |  |  | |  |  |  |
| Institutional policies for oral and parenteral chemotherapy ordering, preparation, administration, disposal, management of spills, hazardous medication exposure etc |  |  |  |  | |  |  |  |