

Levels of Care - Impact Assessment

Supportive Phase of Care

District Health Authority:

Hospital: _____

Assessed Level of Care for Supportive Phase of Care

| Completed by: | |
|----------------------|--|
| DHA designate: | |
| Date: | |
| Contact Information: | |

| | Level of Care | F | Require | ed | Reco | mmer | nded | Actions / Comments |
|---|---------------|------|---------|---------------|------|---------|---------------|--------------------|
| | | Full | Partial | No Congruence | Full | Partial | No Congruence | |
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| Physical Facilities | | | | | | | | |
| Safe, child friendly area to isolate child from nosocomial infections. [ED/ambulatory Care] | Basic | | | | | | | |
| Pediatric inpatient unit [may be shared] with isolation rooms. | Intermediate | | | | | | | |
| Pediatric inpatient unit with isolation rooms [dedicated pediatric unit preferred]; Intensive Care Unit able to stabilize critically ill child for transportation to Sub-Specialty Centre | Advanced | | | | | | | |
| In-patient and ambulatory care areas with appropriate isolation and reverse isolation capabilities | Sub-specialty | | | | | | | |
| Sub-Specialty care pediatric Emergency Department services with advanced pediatric appropriate resuscitation equipment available on- site 24 hours/day, 7 days per week | | | | | | | | |
| Pediatric Intensive Care Unit; pediatric operating rooms. | | | | | | | | |
| Personnel | | | | | | | | |
| A family physician or pediatrician in the home community willing to manage the care of a child/adolescent with cancer or a serious hematological disorder which includes: Managing the side- effects or complications of oral chemotherapy. Able to recognize or have access to information to anticipate common chemotherapy-related toxicities (e.g. bleeds and febrile neutropenia). | Basic | | | | | | | |
| Health professionals able to provide pediatric care and monitoring such as immunizations, subcutaneous injections, insertion of nasogastric tube, GCSF administration and vital signs monitoring. | | | | | | | | |

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| Personnel cont'd | | ī | - T | 1 | - | | | |
| Physician or nurse with 24/7 coverage in emergency department to initiate treatment or stabilize patient and arrange for transfer as necessary. | Basic cont'd | | | | | | | |
| If pediatric palliative care is to be provided, a physician willing to provide care in consultation with local or sub- specialty experts as needed. | | | | | | | | |
| Health and/or psychosocial professionals able to provide family support and assist with arrangements for transfer as required. | | | | | | | | |
| Community Resources for Palliative Care in place | | | - | 1 | | | | |
| Physicians [preferably a pediatrician if available in the district] able to manage the supportive care of a child with cancer or a serious hematologic disorder in liaison with a pediatric hematologist/ oncologist. | Intermediate | | | | | | | |
| Nurses with competencies to access and care for CVADs [available 24/7 | | | | | | | | |
| Nurses with APPHON/RROHPA established competencies to care for this patient population at the Intermediate level.* | | | | | | | | |
| Access to social worker and/or psychologist able to provide applicable psychosocial support | | | | | | | | |
| Dietician on site with applicable expertise to provide nutritional assessment, monitoring and support, including enteral feeds, in liaison with tertiary dietician. | | | | | | | | |
| Pharmacists with expertise in supportive care guidelines | | | | | | | | |

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| Personnel cont'd | | - | | | | | | |
| Access to physiotherapy, occupational therapist and respiratory therapist able to collaborate with tertiary colleagues to deliver pediatric care as required. | Intermediate cont'd | | | | | | | |
| Pediatricians prepared to manage the supportive care of a child with cancer or a serious hematologic disorder in liaison with a pediatric hematologist/ oncologist; | Advanced | | | | | | | |
| 1.) treating low risk patients with febrile neutropenia in consultation with an infectious disease specialist and/or pediatric hematologist/ oncologist. | | | | | | | | |
| 2.) treating varicella zoster [with IV acyclovir] in consultation with an infectious disease specialist and a pediatric hematologist/oncologist. | | | | | | | | |
| 3.) preventing common complications and treating oncologic emergencies such as metabolic disturbances and hemorrhagic complications, etc. | | | | | | | | |
| Pediatrician on call 24/7. | | | | | | | | |
| Pediatric nurses with APPHON/RROHPA established competencies to care for this patient population at the advanced level. | | | | | | | | |
| Able to provide one-on-one nursing support if needed [or arrange transfer]. | | | | | | | | |
| Social worker and/or psychologist on site able to provide applicable psychosocial support | | | | | | | | |
| Dietician on site with applicable expertise able to provide nutritional assessment, monitoring and support, including parenteral feeds, in collaboration with Sub- Specialty | | | | | | | | |

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| Centre. | | | | | | | | |
| Personnel cont'd | | | | | | | | |
| Access to physiotherapy, occupational therapy and respiratory therapist with pediatric experience. | Advanced cont'd | | | | | | | |
| Access to Child Life Specialist. | | | | | | | | |
| Pediatric hematologist/oncologists** who develop a comprehensive treatment plan for each child/adolescent, available 24/7 | Sub-Specialty | | | | | | | |
| 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 APPHON/ROHPPA established competencies to care for this patient population at the subspecialty level.* Pediatric psychologists** | | | | | | | | |
| Social workers** who have membership in the Association of Pediatric Oncology Social Workers (APOSW) and who have additional education and expertise in the management of children and adolescents with cancer or serious blood disorder Pediatric neuropsychologists | | | | | | | | |
| School intervention/education support personnel | | | | | | | | |

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| Personnel cont'd | | | | | | | | |
| Clinical pharmacists** with expertise in anti-neoplastic agents and therapies for serious hematologic disorders Dieticians** with expertise in the nutritional requirements of children and adolescents with cancer or serious hematologic disorder Physical therapists**, occupational therapists** and respiratory therapists** | Sub-specialty cont'd | | | | | | | |
| with expertise in pediatric oncology and hematologic disorders Home health care professionals* with expertise in delivering health care to children and adolescents with cancer or serious hematologic disorder | | | | | | | | |
| Child life specialists with pediatric hem/onc expertise.* | | | | | | | | *Required for Holistic Care |
| Pharmacy | - | - | _ | - | - | | | |
| Ready access to pharmacy with appropriate antibiotics, anti-emetics, pain medications and other drugs required for provision of supportive care and symptom management. | Basic | | | | | | | |
| Hospital pharmacy available on site with access to pediatric specific resuscitation drugs, level appropriate antineoplastic and supportive agents [and IV Phosphate and Magnesium] | Intermediate | | | | | | | |
| Able to provide pediatric total parenteral nutrition. | Advanced | | | | | | | |
| Medications for a broad range supportive care treatment. | Sub-specialty | | | | | | | |
| Equipment and Resources | - | - | • | - | | | | |
| 24/7 Emergency Department services with basic resuscitation equipment | Basic | | | | | | | |

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| Equipment and Resources cont'd | | | | | - | | | |
| Basic investigations to ensure child can be transferred safely. | Basic cont'd | | | | | | | |
| Able to obtain appropriate blood samples, including ability to collect micro-samples and peripheral venous blood from children and transport blood samples as appropriate; urine dipstick. | | | | | | | | |
| 24/7 onsite ED with pediatric appropriate resuscitation equipment, drugs and dosing, and an onsite physician; applicable supportive care guidelines/pre-printed orders | Intermediate | | | | | | | |
| 24/7 onsite ED with advanced pediatric appropriate resuscitation equipment, an onsite physician, and access to an on call pediatrician 24/7; | Advanced | | | | | | | |
| Applicable supportive care guidelines/pre-printed orders. | | | | | | | | |
| Services for dialysis for children and adolescents | Sub-specialty | | | | | | | |
| Access to services for cytopheresis and plasmapheresis | | | | | | | | |
| Provision of psychosocial and supportive care as per treatment plan | | | | | | | | |
| Pain management program and guidelines | | | | | | | | |
| Rehabilitative services | | | | | | | | |
| Palliative care/ bereavement follow-up services | | | | | | | | |
| Long-term follow-up and transition services | | | | | | | | |

| | Level of Care | Required | | Reco | mmer | nded | Actions / Comments | |
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| Equipment and Resources cont'd | | ī | | 1 | Ŧ | | | |
| Pediatric dental services | Sub-specialty cont'd | | | | | | | |
| Procedural deep and conscious sedation services provided by an anesthetist | | | | | | | | |
| Lab/Diagnostic Imaging | | 1 | | | | | | |
| Not Applicable | Basic | | | | | | | |
| Guidelines readily available for processing malignant specimens found unexpectedly | Intermediate to Advanced | | | | | | | |
| Lab: CBC/diff, BUN, Na, K, Creatinine, glucose stat [within 1 hour] if needed; PT PTT, access to fg test results within two days if needed; Ca, Phos Mg, AST, ALT, bili T/D, amylase within 24 hours; creatinine clearance. | Intermediate | | | | | | | |
| Microbiology: aerobic and anaerobic bacterial cultures. | | | | | | | | |
| Blood bank: FFP, CMV negative, irradiated PRBC onsite; access to cryo on site if caring for at risk patient; able to obtain CMV irradiated platelets within 24 hrs; access to appropriate blood product filters, factor concentrates, IVIG, VZIG. | | | | | | | | |
| Diagnostic Imaging: equipment and personnel able to obtain and interpret pediatric ECGs, chest x-rays, abdominal films, and ultra-sound | | | | | | | | |
| Able to transmit ECG images to Sub- Specialty centre. | | | | | | | | |
| Diagnostic Imaging: nuclear medicine facilities for GFR [or creatinine clearance], WMEF [or echocardiogram]. | Advanced | | | | | | | |

| | Level of Care | F | Required | | Recommended | | | Actions / Comments |
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| Lab/Diagnostic Imaging | | - | | | - | | | |
| Experienced in pediatric CT scanning - able to adjust dosage for pediatric patients | Advanced cont'd | | | | | | | |
| Lab: access to bacterial culture on site and fungal culture results in a timely manner. | | | | | | | | |
| Blood Bank: access to CMV irradiated platelets for transfusion with 12 hours. | | | | | | | | |
| Diagnostic Imaging with pediatric expertise for US, CT scanning, nuclear medicine*, MRI*, angiography* and interventional radiology | Sub-specialty | | | | | | | |
| Pediatric expertise in audiology, EEG, and ECG testing and interpretation. | | | | | | | | |
| Clinical laboratories with 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*. | | | | | | | | |

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| Education/Certification | | | | | - | | | |
| Commitment to ongoing education related to pediatric hematology/oncology. | Basic to Advanced | | | | | | | |
| Tertiary education qualifications and maintenance of ongoing education; support of educational endeavors for other health professionals as needed | Sub-Specialty | | | | | | | |
| Communication links | | | | | | | | |
| Identification of a 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 | Basic and Intermediate | | | | | | | |
| Designated contact persons for dietician, child life specialist, social work and/or psychology. | Advanced | | | | | | | |
| 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 | Sub-specialty | | | | | | | |

* see "Practice Standards and Competencies for Nurses Providing Pediatric Cancer Care in Atlantic Canada (2007)" and "Practice Standards and Competencies for Nurses Providing Pediatric Non-malignant Hematology Care in Atlantic Canada (2008)."