

**SERVICE DELIVERY MODEL**  
**FOR PHYSICAL THERAPY SERVICE**  
**TO THE DIVISION OF PEDIATRIC HEMATOLOGY/ONCOLOGY/BMT**

**Purpose Of The Document**

The purpose of this document is to describe the service delivery model for physical therapy service to the Division of Pediatric Hematology/Oncology/BMT.

**Physical Therapy Coverage**

1.2 FTE

Areas Covered:

- 3B and 2B Oncology (Inpatients); 3R post-surgical patients
- Neuro-Oncology (3R Inpatients and Outpatients through clinic/direct contact)
- Oncology Clinic (Outpatients)
- Hematology (In- & Outpatients)

Physical therapy coverage is provided 5 days per week. Emergency on-call is provided until 20:00 hrs. Patients seen will be prioritized as outlined below. When the oncology physical therapist is away (e.g. sick or vacation), the physical therapy department will address urgent requests as staffing allows.

**Physical Therapy Referrals**

The physical therapist has a blanket referral for all patients. Identified issues may be brought to the attention of the oncology physical therapist by parent, RN or doctor.

The physical therapist cannot monitor all the children in the Division of Hematology/Oncology/BMT for therapy needs and, therefore, relies on team members to communicate patient concerns regarding mobility, secretion clearance, or function. The physical therapist relies on the out-patient nursing and medical staff to arrange for follow-up appointments as required.

**Approach**

- Caseload will be prioritized daily in the following order:
  - Safety issues/risk of harm if not addressed, e.g. Risk of aspiration, pressure sores, risk of falls at home
  - Vincristine screening prior to administration of chemotherapy
  - Rehabilitation – e.g. inpatient neuro-oncology; ortho-oncology; debilitation secondary to complications of treatment
  - Interventions upon which treatment/discharge is dependent, e.g. equipment for home
- Part of the role of the oncology physical therapist is community liaison, education and support.

## **Core Areas of Physical Therapy Service**

1. Secretion Clearance
  - a. Prevention of pooling of secretions in patients with mucositis or prolonged immobilization
  - b. Prevention of atelectasis and treatment facilitating secretion clearance
2. Mobility
  - a. After surgical resection of tumor (abdominal, soft tissue or boney). Patients will be assessed and prescribed appropriate mobility aids.
  - b. Pressure sore prevention and treatment recommendations – from lying in bed or sitting in a wheelchair
  - c. Impairment secondary to complications from cancer; treatment related; prolonged isolation.
3. Vincristine neuropathy screening
  - a. Patients referred by doctors in OP/IP Oncology will be screened by physical therapist covering to determine need for resting night splints, ankle-foot orthoses (AFO's); need for home stretching program; discuss with medical staff recommendations re: administration of chemotherapy.
  - b. Ongoing assessment to be coordinated by the Primary RN/MD
4. Generalized fitness programs with guidelines (see attached “Physiotherapy Rules of the Road”) will be developed for children in situations of prolonged isolation (AML protocol; Peripheral Blood Stem Cell Transplant; Bone Marrow Transplant). This may include the use of virtual video games such as Eye Toy; Wii; Dance Dance Revolution and/or Guitar Hero.
5. Skin care
  - a. Provision/recommendation of positioning care plan for RN's/parents of children with mobility issues.
  - b. Recommendation of specialized equipment (in consultation with RN/OT) e.g. KCI bed etc. for prevention of bed sores/skin breakdown.
6. Discharge planning
  - a. Prepare the home for the patient's discharge (eg. Equipment procurement, teach caregivers how to perform/assist with transfers; crutch walking flat and on stairs if required; home exercise program prescription).
  - b. Referral to community physical therapist for supervision and progression of exercise routine where such services exist. Ongoing liason with community physical therapist as the patient progresses/regresses throughout treatment.
  - c. Letters supporting application for eligibility for the At Home Program, referral to community rehabilitation programs e.g. Community Brain Injury Program, GF Strong, Sunny Hill etc. as required to meet patient/family needs.
  - d. Neuro-oncology patients will be referred to SHHC (Sunny Hill Health Centre) or CBIP (Community Brain Injury Program) as appropriate. Ongoing consultation as needed for changing equipment needs.
7. Infant/child development
  - a. Developmental assessments  
If required by protocol, BCCH physical and occupational therapist will try to accommodate.
  - b. Developmental stimulation programs encouraging parental involvement including positioning to optimize function will be developed and monitored.