La Fondation de l'Hôpital de Montréal pour enfants

The Montreal Children's Hospital Foundation

Optimizing the capacity for physiological monitoring of the pediatric population on the hematology-oncology inpatient unit at the Montreal Children's Hospital (MCH)

The MCH wishes to acquire new physiological monitors for the MCH inpatient units in order to offer adequate monitoring capacity in each pediatric in-patient room (specifically for the medical-surgical wards and the **hematology-oncology ward**). The addition of this equipment purchase will improve the ability of in-patient wards to accept transfers from other areas (e.g. emergency, intensive care units and the advance care unit) and will help to maximize the benefits of single patient rooms.

With the move the Glen site, the MCH is reinforcing its mandate to provide high-quality tertiary, specialized patient care. Currently, 70 of the 154 beds at the MCH are for critically ill children. Children with simpler cases are no longer admitted to the inpatient units, thanks to the development of our ambulatory care capacity. Therefore the complexity of admitted patients has been, and will continue to be, increasing steadily.

The hematology-oncology ward is now spread over a large physical space, resulting in a pressing need to have each room capable of advanced physiological monitoring, coupled with central monitoring and efficient alarm transmission. Physiologic monitoring systems measure and display waveforms or numerical data for various parameters, including ECG, respiratory rate, blood pressure, body temperature, etc. Continuous monitoring is a valuable tool that helps provide additional information to the medical and nursing staff about the physiologic condition of the patient. They can then better evaluate a patient's condition and make appropriate treatment decisions.

Currently, most patient rooms are equipped with a vital signs machine without the capacity to transmit physiological parameters to the nursing stations. The addition of a physiological monitor in each room would remedy this situation and allow medical personnel to respond more rapidly when a patient is in distress.

Having dedicated monitoring equipment for each patient would have a positive financial impact as well, by preventing the damage and wear and tear that can occur when moving equipment from room to room.

A total of 13 physiological monitors (12 for the rooms plus a back-up) are needed to fully equip the hematology-oncology ward on the 7th floor.

The cost per monitor is $20,000, for a grand total of $260,000.