BOX 8A: OPTIMAL ACUTE INPATIENT STROKE CARE

**DEFINITION:**

*A stroke unit* is a specialized, geographically defined hospital unit dedicated to the management of stroke patients and staffed by an experienced interdisciplinary stroke team. Refer to the resource *Taking Action Towards Optimal Stroke Care* for detailed information about stroke unit criteria.

**Alternate Stroke Care Models:** It is recognized that many models of acute stroke care exist across Canada. Many organizations do not have the official administrative designation as an 'acute stroke unit'; however, they have most or all of the stroke unit criteria in place and should be recognized as attempting to meet optimal stroke care in the face of administrative/structural resource challenges. These models are sometimes referred to as clustered acute stroke care, or purposeful grouping of stroke patients.

**Core Elements of Comprehensive Stroke and Neurovascular Care** *(Based on Stroke Unit Trialists Collaboration 2007)*

- a. It is recognized that not all hospitals are able to deliver all of the stroke unit elements, and every hospital should be **Taking Action** to establish protocols and processes of care to implement as many elements as possible to achieve optimal stroke care delivery within their geographic location, hospital volumes and resource availability (human, equipment, funding). Refer to the resource *Taking Action Towards Optimal Stroke Care* for detailed information about stroke unit criteria.

- b. Specialized care for patients with ischemic stroke, intracerebral hemorrhage (ICH), and transient ischemic attack (TIA) (care may be expanded in some institutions to include patients with subarachnoid hemorrhage [SAH] and other neurovascular conditions);

- c. Dedicated stroke team with broad expertise – including neurology, nursing, neurosurgery, physiatry, rehabilitation professionals, pharmacists, and others;

- d. Consistent clustered model where all stroke patients are cared for on the same hospital ward with dedicated stroke beds by trained and experienced staff, including rehabilitation professionals;

- e. Access to 24/7 imaging and interventional neuroradiology expertise;

- f. Emergent neurovascular surgery access;

- g. Protocols in place for hyperacute and acute stroke management, and seamless transitions between stages of care (including pre-hospital, Emergency Department and inpatient care);

- h. Dysphagia screening protocols in place to assess all stroke patients without prolonged time delays prior to commencing oral nutrition and oral medications;

- i. Access to post-acute rehabilitation services, including inpatient, community-based, and/or early supported discharge (ESD) therapy;

- j. Discharge planning starting as soon as possible after admission, and anticipating discharge needs to facilitate smooth transitions;

- k. Daily/bi-weekly patient care rounds with interdisciplinary stroke team to conduct case reviews, discuss patient management issues, family concerns or needs, and discharge planning (discharge or transition to the next step in their care, timing, transition requirements);

- l. Patient and family education that is formal, coordinated, and addresses learning needs and responds to patient and family readiness;

- m. Provision of palliative care when required, ideally by a specialized palliative care team;
n. Ongoing professional development for all staff – stroke knowledge, evidence-based best practices, skill building, orientation of trainees;

o. Involvement in clinical research for stroke care.