PROVINCIAL STROKE UNIT CARE DEFINITION - UPDATE April 2021

RATIONAL

The following is taken from the Canadian Stroke Best Practice Recommendations:

> "Stroke unit care reduces the likelihood of death and disability by as much as 30 percent for men and women of any age with mild, moderate, or severe stroke. Stroke unit care is characterized by a coordinated interdisciplinary team approach for preventing stroke complications, preventing stroke recurrence, accelerating mobilization, and providing early rehabilitation therapy. Evidence suggests that stroke patients treated on acute stroke units have fewer complications, earlier mobilization, and pneumonia is recognized earlier. Patients should be treated in a geographically defined unit, as care through stroke pathways and by roving stroke teams do not provide the same benefit as stroke units. Access to early rehabilitation is a key aspect of stroke unit care. For patients with stroke, rehabilitation should start as early as possible and rehabilitation should be considered an intervention that can occur in any and all settings across the continuum of stroke care."

BACKGROUND

Stroke unit capacity and locations within a health authority should be designed based on population planning and analysis with the goal of assuring all appropriate patients are treated on a stroke unit. In BC, the goal is that at least 75% of all stroke and TIA patients are cared for on a designated stroke unit. Different strategies can support the required volume and competency on a stroke unit, including the use of integrated units, where patients stay for both the acute and inpatient rehabilitation phases of their care on the same unit. Population planning in each area will guide the determination of what is a reasonably sized stroke unit for that geography and how various sites can consolidate care to garner the benefits of a highly skilled and efficient stroke team. The literature is clear that higher volume centres have better outcomes. SSBC encourages sites to think about current need and future need, and not be directed solely on current capacity.

DEFINITIONS

Stroke Unit: The physical space or hospital unit where stroke patients are cared for

Stroke Unit Care: The care that is provided to stroke patients in that physical space

BEST PRACTICE ELEMENTS OF STROKE UNIT CARE

The following is based on the Canadian Stroke Best Practice Recommendations. Wherever appropriate, language is taken directly from the Recommendations. For additional details, including evidence levels, please see www.strokebestpractices.ca

1. Patients admitted to hospital with an acute stroke or transient ischemic attack should be treated on an inpatient stroke unit as soon as possible; ideally within 24 hours of initial emergency department triage.

2. Patients should be admitted to a stroke unit which is a specialized, geographically defined hospital unit dedicated to the management of stroke patients.
    a. Where a geographic area (e.g. HSDA) with lower volumes is geographically isolated from a larger centre, it may be reasonable to create a smaller stroke unit with formal relationships to larger sites to provide support and expertise as appropriate
    b. Technology, including virtual health, should be utilized to meet stroke unit care requirements at these smaller sites where local services or resources are not available and not practical to obtain locally.

3. The core interdisciplinary team on the stroke unit should consist of health care professionals with stroke expertise including physicians, nurses, occupational therapists, physiotherapists, speech-language pathologists, social workers, pharmacists and clinical nutritionists (dietitians).
    a. Ideally, these physicians will have formal stroke training and would typically include stroke neurologists and/or stroke physiatrists
    b. All team members should participate in regular and ongoing professional education to maintain relevant clinical competency
    c. Teams should develop a standardized approach to communication that supports patient care, progress, and timely transitions
    d. Teams should be structured to achieve best practice timelines, including consideration of 7 day/week allied health scheduling

4. The interdisciplinary team should assess patients within 48 hours of admission to hospital and formulate a management plan. For further details see CBPSR Module 3 – 1 (Initial Stroke Rehabilitation Assessment www.strokebestpractices.ca)
    a. Clinicians should use standardized, valid assessment tools to evaluate the patient's stroke-related impairments and functional status.
    b. Impairment assessment components should include: secondary stroke prevention therapies, fever, glucose, and blood pressure monitoring, skin breakdown, and venous thromboembolism prophylaxis.
    c. Functional assessment components should include: dysphagia, mood and cognition, mobility, activities of daily living, and bowel and bladder function

d. Appropriate investigations and management strategies should be implemented for all hospitalized stroke and TIA patients to optimize recovery, avoid complications, prevent stroke recurrence, and provide palliative care when required

e. Patients should be mobilized within 24-48 hours of initial hospital admission

f. Alongside the initial and ongoing clinical assessments regarding functional status, a formal and individualized assessment to determine the type of ongoing post-acute rehabilitation services required should occur as soon as the status of the patient has stabilized, and within the first 72 hours post-stroke, using a standardized protocol (including tools such as the alpha-FIM).

g. Discharge planning should begin early and be guided by the clinical and social assessments, including a pre-discharge assessment of needs to ensure a smooth transition to the next level of care (e.g. integrated unit, stroke rehabilitation unit, outpatient stroke rehabilitation, from stroke unit to community or other transitional setting etc.)

h. Patients and families should be actively engaged in care, decision making, and discharge planning; patients and families should be provided with education about stroke care and outcomes

5. All patients with stroke should receive rehabilitation therapy based on their needs as early as possible on the stroke unit once they are medically stable and able to participate in active rehabilitation. For further details see CBPSR Module 3 – 3 (Delivery of Inpatient Stroke Rehabilitation www.strokebestpractices.ca).