CANADIAN STROKE BEST PRACTICE RECOMMENDATIONS

Secondary Prevention of Stroke

Seventh Edition, Update 2020

TABLE TWO: H&S CSBPR Core Elements of Stroke Prevention Services (Update 2020)

Gladstone D, Poppe A (Writing Group Chairs)
on Behalf of the Canadian Stroke Best Practice Recommendations Secondary Prevention of Stroke Writing Group and in collaboration with the Canadian Stroke Consortium

TABLE TWO: H&S CSBPR Core Elements of Stroke Prevention Services (Update 2020)

Secondary Prevention Services (SPS) Core Element	Alignment with CSPBR* Sections	Description ^
Organizational Elements of Stroke Prevention Services		
Designated Prevention Services	CSBPR-SPOS Section 1, 3	❑ The SPS is identified and acknowledged within the local/regional health system as providing stroke prevention services. ❑ The SPS is conducted in a specific space within a hospital or the community, such as within the ambulatory/outpatient clinics or a physician's office, or through virtual modalities. ❑ The SPS follows protocols and pathways for an individualized evidence-based prevention strategy for patients. ❑ Emergency departments have responsibility to provide SPS to patients or ensure referrals are made to an appropriate SPS prior to patient discharge from the ED. ❑ The timing of initial assessment in the SPS is based on current recommended time frames based on time from symptom onset and presentation. Access to the SPS will be expedited based on risk stratification. ❑ The SPS are accessible to stroke and transient ischemic attack patients with disabilities (e.g., physical, cognitive, and perceptual). ❑ The SPS make provisions to provide care to and support patients with aphasia and other communication challenges.
Operation Times		❑ The SPS has set hours of operation that are communicated to all referral sources.
Stroke Team Staffing	SPOS Section 1	❑ The SPS has access to an interprofessional group of stroke experts, including neurology, internal medicine, vascular surgery, neurosurgery, rehabilitation medicine, neuropsychiatry, nursing, pharmacy, psychology, neuropsychology, rehabilitation therapy (such as physiotherapy, occupational therapy, speech-language pathology), social work, dietetics, community liaisons/navigator, research, and administration. ❑ Additional Experts are accessed directly within the SPS or through timely pre-arranged referral patterns outside the SPS. ❑ Staff have appropriate training and education to remain current with updates to the CSBPR. ❑ Staff are able to provide care to persons with aphasia and other communication challenges (such as having skills in supportive conversation).
Service Scope	SPOS Section 1	❑ The SPS has a clearly defined scope of practice that is communicated to referring sources – states the range and types of services offered, such as same day urgent referrals, or less urgent services only. ❑ The SPS defines its role as providing at minimum a one-time assessment; or additionally assessment and short-term follow-up, long-term follow-up, and/or collaborative care with primary care practitioner.

Referral Mechanisms	SPOS Section 1 Acute Stroke Management, Sections 1, 3	❑ The SPS has a standardized referral process and documentation (e.g., referral form) to access services. ❑ The SPS has a designated person coordinating referrals and scheduling appointments appropriate to degree of urgency. ❑ The SPS is aware of, and in communication with all potential referral sources regarding referral process and target response times. ❑ All referring sources are aware of the referral process and required documentation for access to the SPS. ❑ The SPS has processes to regularly review and prioritize referrals and respond appropriately based on degree of urgency. ❑ The SPS monitors wait times from referral to first assessment appointment. ❑ The SPS provides access to patients living outside the immediate catchment for the service, to support patients living in rural and remote settings.
Use of Technology – Virtual Care	Virtual Care Section 1	❑ The prevention service considers virtual care technology to increase access to services for all patients, especially those living in rural and remote settings without local access to stroke specialists and those who do not require in-person visits. ❑ The SPS established/validated criteria to determine the best modality for each patient and each encounter based on the purpose and goals for each visit, and taking into account patient values, preferences, and health needs. ❑ A contingency plan should be established to have patients seen in person in a timely way should the need arise following a virtual care encounter.
Access to Diagnostic Services	SPOS Section 1, 7, 8, 10, 11, 12 ASM Sections 1, 3	❑ The SPS has timely access to relevant diagnostic services onsite (brain and vascular imaging with CT scan/MRI, CTA, carotid ultrasound, ECG, Holter monitoring, prolonged cardiac monitoring, echocardiogram, laboratory services). ❑ Agreements are in place with diagnostic departments to access services on a more urgent basis when required (e.g., same day, 24-hour, one week). ❑ If services are not available on site, agreements are in place for timely access to diagnostic services within the region, or next closest facility providing such services without undue wait times.
Care Delivery Elements of Stroke Prevention Services		
Screening and Assessment	SPoS; ASM; MCF	❑ SPS routinely screens patient for vascular risk factors in accordance with current evidence-based stroke guidelines. ❑ The SPS has a defined set of validated screening practices that includes timing of such screens in accordance with best available evidence. ❑ Lifestyle risk factors to be assessed include smoking, lifestyle behaviours, diet, weight, exercise, sodium, alcohol consumption, birth control and hormone replacement therapy, recreational drug use, and medication adherence. ❑ Screening for medical risk factors include blood pressure, depression, cognition, atrial fibrillation, bleeding risk, lipids, diabetes, and other underlying cardiac issues. ❑ Assessment for sequelae of stroke, including stroke severity, physical functioning, swallowing, fatigue, depression, cognition,

		and post-stroke neuropathic pain as appropriate. . H&S Post-Stroke Checklist available to support screening of patients. ❑ Protocols in place for use of validated tools to support assessment and diagnosis. ❑ Process in place to refer patients to other specialists as required to determine or confirm presence of risk factors (such as cardiology for atrial fibrillation determination).
Diagnosis and Etiology	SPoS; ASM; MCF	❑ Diagnosis should specify the type of stroke or transient ischemic attack the patient has experienced (i.e., ischemic, or hemorrhagic, and if latter whether subarachnoid or intracranial hemorrhage). ❑ Underlying etiology should be determined with appropriate investigations when possible and communicated to care providers and patient.
Treatment	SPoS sections 3-12	❑ Develop individualized stroke prevention plan for each patient, including defining agreed upon goals of care. ❑ Initiate treatment strategies for identified risk factors and clinical conditions as specified in the CSBPR. ❑ Process in place for timely access to carotid revascularization services onsite or through referral to closest centre providing services, within CSBPR target treatment times (as soon as possible, within 2 weeks of index stroke or transient ischemic attack event). ❑ SPS has processes in place to access rehabilitation (inpatient or community) to meet needs of patients.
Follow-up Practices	SPoS all sections ToCFS Rehab	❑ On follow-up, SPS routinely monitors patients for achievement of therapeutic targets and stability within targets. ❑ On follow-up, SPS routinely monitors patients for adherence to prescribed risk factor management strategies and therapies. ❑ SPS re-assesses patients for ongoing physical, functional, psychological, and social changes. ❑ SPS has process in place for patients and primary care providers to re-access SPS services for a patient if changes in health status, or additional consultation on prevention management is required. ❑ SPS has process in place for patients who do not have a primary care provider, to assist with identification of a primary care provider, or continuing to follow patient as required within the SPS. ❑ The SPS staff have processes in place to review each patient's driving status (e.g., driver/non-driver, holds drivers' license) and follow National guidelines and reporting requirements when indicated.
Communication and Continuity		❑ Must have timely method of communication of recommendations to the referring physicians, the patient's primary care provider, and other members of the patient's circle of care to ensure continuity of care. ❑ Communications should address and include information on completed assessments and findings, diagnosis, etiology, treatment plan, prescribed/recommended therapies, additional referrals, and clarification on who is responsible for ongoing follow-up, prescription renewals, and long-term management as well as referral back to SPS if needed.
Patient and Family Elements of Stroke Prevention Services		

Education, Promotion of Self-Management	ToCFS Sections 1, 2 SPoS Section 7	❑ SPS routinely provides personalized verbal education to patients and families, and caregivers. ❑ The SPS provides written and electronic educational resources (such as HSF Your Stroke Journey). ❑ The SPS assesses patient, family and caregiver knowledge, self-management capability, and learning needs for skills and coping mechanisms (e.g., using HSF Post-Stroke Checklist). ❑ Education materials are available in a range of formats, are culturally appropriate for the catchment population, aphasia friendly, and other languages as required. ❑ Translation services available for patients during SPS visits if required.
Linkages	ToCFS Section 6	❑ Provide patients and families with links to community resources and programs to support stroke recovery and implementation of prevention strategies, such as smoking cessation programs, community dietitians, community-based exercise programs, diabetic education programs, stroke support groups. ❑ The SPoS is able to initiate appropriate referrals for home care support services, specialized equipment, and process for driving assessment as required. ❑ The SPoS is able to recommend and or refer patients to community resources and programs to support adherence to prescribed risk factor management strategies and therapies (including pharmacotherapies) thereby supporting stroke recovery.
Outcome and Quality Elements of Stroke Prevention Services		
Quality and Accountability	All modules	❑ The SPS has mechanisms in place to routinely collect data on patients, including time intervals from referral to follow-up, services provided, effectiveness/outcome of care, physical measurements (e.g., weight, blood pressure); and can capture changes over time. ❑ The SPS has a process for reporting data to staff, funders, and patients. ❑ The SPS compares performance to pre-set targets and benchmarks and engages in quality improvement initiatives to achieve targets and readjust as appropriate. ❑ The SPS should engage in relevant clinical research in the area of stroke prevention when possible.

^ Based on literature review, Delphi-process feedback, Canadian Stroke Best Practice Recommendations, and Accreditation Canada Stroke Distinction Standards. * SPoS – Secondary Prevention of Stroke Best Practice module; ASM – Acute Stroke Management guidelines module; MCF – Mood, Cognition and Fatigue CSBPR module; ToCFS – Transitions of Care Following Stroke module; Rehab – Stroke Rehabilitation module