Ontario Health
CorHealth Ontario

Frequently Asked Questions

Release of New Ontario Stroke Unit Definition - A best practice standard for stroke units in Ontario

The Stroke Unit Access and Quality Initiative is a multi-year, priority initiative within Ontario Health – CorHealth's Stroke Portfolio and is embedded within Ontario Health's Annual Business Plan. A key milestone of the initiative is the release of the New Ontario Stroke Unit Definition - A best practice standard for stroke units in Ontario (2023).

Below are Frequently Asked Questions (FAQs) to support understanding of the initiative, the release of the new definition and related components.

Please contact Ontario Health-CorHealth's Service Desk (OH-CORH_Service@ontariohealth.ca) for any inquiries related to the release of the document.

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Stroke Unit Access and Quality Initiative

Q: What is Ontario Health – CorHealth's Stroke Unit Access and Quality Initiative?

A: In early 2021, it was noted by stroke system partners in Ontario that access to stroke unit care and the quality of stroke unit care delivery needed to be a priority for improvement. This feedback was supported by data which demonstrated that only 56% of patients with stroke in Ontario were gaining access to this life and disability-saving intervention. The Stroke Unit Access & Quality Initiative aims to enable better outcomes for patients in Ontario who experience a stroke, by ensuring they have equitable access to evidence-based stroke unit care. This initiative is a **multi-year, multi-phase, priority initiative** within Ontario Health's Annual Business Plan.

Phase 1 of this initiative is focused on understanding the current state of stroke unit access in Ontario and setting the foundation for best practice stroke unit care in the province through a renewed definition with clearly defined core components.

Q: Which stroke and health system partners have been engaged in this work?

A: The following groups are helping to guide and direct this work:

- An advisory Stroke Unit Task Group (SUTG), with provincial representation and experience in facilitating change in stroke unit access and quality
- The Stroke Regional and District Advisory Committee (RDAC)
- The Ontario Health Regions and identified Ontario Health Regional Stroke Leads
- Working groups and individuals from other organizations (e.g. Heart & Stroke, Accreditation Canada - Stroke Distinction, Regional Stroke Network Acute Best Practice Coordinators)
- Persons with lived experience

About the Definition

Q: What is the New Ontario Stroke Unit Definition - A best practice standard for stroke units in Ontario document?

A: Ontario Health – CorHealth, in collaboration with stroke system partners, identified the need to develop a renewed definition of a stroke unit with defined core components, that stroke unit hospitals should be working towards to deliver best practice and begin to reduce inequities in stroke unit care.

The document includes a revised definition statement and 10 core components. The document is grounded in the Canadian Stroke Best Practice Recommendations and includes additional guidance derived from persons with lived experience including family / caregivers.

The primary audience of the document is all current and future stroke unit hospitals in Ontario. The document is available on the Ontario Health – CorHealth website.

Q: Why is this document being introduced now?

A: The previous definition of a stroke unit in Ontario was established in 2014. This definition, however, was described by stroke system partners as unclear, resulting in variation in interpretation and operationalization. In response to this feedback, the need to undertake a review of the current definition and update it where appropriate, was identified at the outset of the initiative. The result of that review is the New Ontario Stroke Unit Definition-A best practice standard for stroke units in Ontario document (2023).

Stroke unit care is the one intervention from which all stroke patients can benefit and has significant impact on short and long-term outcomes. Considering the ongoing health system pressures that many partners are facing, it is important that the new definition and components be made available, to allow stroke unit hospitals, in collaboration with other system partners, to plan and build towards best practice care that will strengthen quality, improve efficiencies, and support better patient outcomes.

Q: What are the key differences between the 2014 definition and the 2023 definition?

A: The 2014 Ontario Stroke Unit Definition was stated as follows:

> *"A geographical unit with identifiable co-located beds occupied by stroke patients on average 75% of the time and has a dedicated interprofessional team with expertise in stroke care with the following professionals at a minimum nursing, physiotherapy, occupational therapy, speech language pathologist". (OSN, 2014)*

The 2023 Ontario Stroke Unit Definition has been simplified and is stated as follows:

> *"A stroke unit is a specialized unit dedicated to the care of persons with stroke and staffed by an experienced, interprofessional stroke team. The unit has designated stroke unit beds that are co-located and in physical proximity to each other. These beds are used to provide care for stroke patients most of the time". (Ontario Health – CorHealth, 2023)*

Key differences include:

- Removal of concept related to occupancy 75% of the time, to eliminate confusion that partners raised when interpreting this definition
- Inclusion of the word 'specialized', to emphasize that stroke unit care is a specialty service/form of care delivery within an acute setting
- The addition of 10 core components to provide further detail and clarity on expectations related to design, staffing, performance, and other processes/resources for a stroke unit.

Q: What additional materials are available to support my team's understanding of this change?

A: The release of the new definition was supported by a suite of accompanying materials and communication activities:

- This **FAQ document** was developed to support system understanding of the change and can be shared as needed across organizations and Networks
- A **provincial webinar** was hosted by Ontario Health – CorHealth in September to support system partners understanding of the change and to answer questions. The webinar was recorded and is available on the Ontario Health – CorHealth website
- **Ongoing support and liaison** between Ontario Health – CorHealth and partners to provide needed guidance related to the release of the new definition

Q: I have reviewed the New Ontario Stroke Unit Definition - A best practice standard for stroke units in Ontario document and my stroke unit hospital does not meet all the components. What does this mean?

A: Stroke unit teams are working diligently to provide stroke unit care to stroke patients in Ontario. Ontario Health – CorHealth acknowledges that current stroke units may not fully meet all components as outlined (e.g., 7 day a week coverage of interprofessional team). Stroke units will be expected to prioritize identified gaps for future action and work collaboratively with system partners to close these gaps.

Understanding the current state with respect to the new definition will be helpful to support future discussions to determine enablers and activities that will move the system toward consistent care.

Q: How does the release of the New Ontario Stroke Unit Definition impact current reporting on stroke unit hospitals? Is anything changing?

A: Ontario Health – CorHealth will transition to using the new definition for stroke unit hospital reporting when FY 23-24 data is available. A process for identifying hospitals that are stroke units against the new definition will occur in partnership with the senior leadership of the hospitals and the Regional Director of the Regional Stroke Network in which the hospital resides.

Q: How will Ontario Health support hospitals in moving towards the new definition and best practice standard?

A: Phase 1 of the Stroke Unit Access and Quality Initiative includes several deliverables: a current state assessment of stroke units in Ontario, a renewed stroke unit definition, a scenario planning tool to determine capacity requirements under different assumptions, and Ontario Health/Regional Stroke Network regional profiles and recommendations. Planning is underway to support the release of these supports and to work collaboratively with Ontario Health Regions and Regional Stroke Networks to identify strategies and opportunities for improving stroke unit access regionally and locally in the coming months.

Q: I am not directly associated with a stroke unit or stroke unit hospital. What does this mean for me?

A: With the release of the new stroke unit definition, it is important that **all partners** understand that a new standard has been set for stroke units in Ontario. All stroke and health system partners are encouraged to support and collaborate with stroke unit hospitals as appropriate as they build towards meeting the new definition and best practice components. The goal is to optimize access to this specialized care and improve outcomes for all persons with stroke in Ontario.

Q: My hospital is currently planning for the opening/development of a new stroke unit in the future. How will the release of the new stroke unit definition impact these plans?

A: Hospitals intending to open stroke units should work with their Regional Stroke Network and Ontario Health Region leads to confirm alignment with stroke regional planning and notify Ontario Health - CorHealth for the purposes of measuring and monitoring this best practice. Hospitals with stroke units currently in development or stroke units that will open in the future should work to align to this new definition and core components. Ontario Health-CorHealth expects that there will be collaborative communications between the hospital and the Regional Director of the Stroke Network, to support the maturation of the stroke unit towards meeting the new definition and best practice components.
Ontario Health – CorHealth will also be co-developing an approach with the Ontario Health Regions and Regional Stroke Networks for ongoing review/follow-up on identified opportunities for action, to help stroke units build towards achieving best practice over the longer-term.

Bed and HHR Capacity

Q: What level of support can be expected to help build up resources and staffing to meet the expected ratios?

A: The Stroke Unit Access & Quality Initiative is a multi-year initiative. All stroke unit hospitals are to complete a self-assessment against the core components and share results with their Regional Stroke Network and Ontario Health - CorHealth.

Ontario Health – CorHealth will use this information, along with other information gathered in Phase 1, to identify areas with Stroke Networks and Ontario Health Regions where provincial and/or regional support may be needed to drive change. It is acknowledged that fully achieving certain components, may take some time due to ongoing health system pressures, however, the spirit of the New Ontario Stroke Unit Definition and Best Practice Standard document is one of “building towards” or “making progress towards” achieving these components through incremental steps. Other components, that are more locally driven, may be more achievable and likely the first to be met.

Additionally, as part of Phase 1 and 2 of the initiative, Ontario Health - CorHealth will work together with Ontario Health Regions and the Stroke Networks to review the current state information and build recommendations for better stroke unit access and implementation within their geographies. An Ontario Stroke Unit Capacity Scenario Planning Tool has been created and will be leveraged as appropriate to support this planning.

Q: Component #4 - Stroke Care Training and Expertise among Staff, indicates "experienced" staff. What is meant by "experienced"?

A: Routine exposure to treating stroke patients over a sustained period is critical for staff to develop experience in working with these patients. This underscores why achieving minimum volumes at the stroke unit hospital and ensuring staff have the majority of their caseload be assigned to stroke patients are important pre-requisites.

Beyond regular exposure to treating stroke patients, staff who work on a stroke unit should regularly receive training and complete continuing education / professional development about stroke care, to provide appropriate and evidence-based best practice care to patients with stroke. Stroke unit managers and leaders are encouraged to routinely monitor the professional development / ongoing education of stroke unit staff (nursing and allied health providers). The Stroke Core Competency Framework, developed by the Regional Stroke Networks, provides healthcare providers with an accessible, comprehensive self-assessment tool to help identify specific learning objectives to support best practices in stroke care.

In addition to the Stroke Core Competency Framework, The Ontario Stroke Regional Educators Group (OREG) is developing checklists and orientation packages that may be leveraged by stroke unit hospitals to support staff onboarding to the stroke unit, promote minimum competencies, and expand and deepen stroke expertise over time.

Q: Have there been any discussions about increasing the number of stroke rehab beds? And decreasing the number of days waiting for the next most appropriate patient transition?

A: The Stroke Unit Access & Quality Initiative and the New Ontario Stroke Unit Definition applies to the acute portion of the patient's stay on the stroke unit. The importance of transitions to the next level of care is highlighted in the New Ontario Stroke Unit Definition and Best Practice Standard document.

Currently, there is a provincial priority for Community Stroke Rehabilitation, which is focused on building capacity to support enhanced access and best practice service in this setting. This work will enable transitions from acute and inpatient rehabilitation beds. It is acknowledged that to optimize stroke unit care, an integrated system is needed, facilitating flow both into and out of the stroke unit.

Q: Will there be a provincial strategy to meet the extensive health human resource gaps for allied staff that are anticipated to persist?

A: The extensive health human resource gaps for allied staff was a key theme that was identified during the Current State Assessment provider interviews. The first step is to better understand the scale of the gaps. This baseline information will be captured within the completed stroke unit hospital self-assessments.

The Ontario Stroke Unit Capacity Scenario Planning Tool will also help to quantify allied health staff resource gaps locally, regionally and provincially. Ontario Health – CorHealth will continue to work with our Ministry of Health and stroke system partners to raise awareness of critical resource needs and encourage and advocate for innovative strategies to address these challenges.

Q: Regarding Component #4 – Stroke Care Training and Expertise Among Staff, what sort of education should be provided to Personal Support Workers (PSWs) and Health Care Aides working on the stroke unit, given that they are providing direct care and support to patients?

A: PSWs, Health Care Aides, Physiotherapy, Occupational and/or Rehabilitation Assistants, and Communicative Disorders Assistants are important roles that may augment the core interprofessional stroke team. The current state assessment pan-provincial operational survey revealed that there is variation with respect to orientation and training of staff across stroke units in Ontario. Support for standardization of stroke unit orientation and training will continue to be an area for further development in Phase 3 of the initiative.

Existing resources which may be helpful include:

- Smart Tips for the education of PSWs
- The Provincial Core Competency Framework, developed by the Regional Stroke Network's Ontario Regional Educators Group (OREG), outlines the knowledge and skills required by individuals working on a stroke unit
- Your Regional Stroke Network may also be a resource to support education and training needs and discussions with the Regional Team (e.g. Acute Best Practice Coordinator, Education Coordinator) are encouraged

The Regional Stroke Networks' Acute Care Best Practice Coordinator Group is currently updating the Stroke Unit Toolkit, which has practical resources for implementing and sustaining a stroke unit (forthcoming resource).

Staffing Ratios and Caseload

Please refer to Appendix A: Summary of Staffing Ratios

Q: Are staffing ratios different for Integrated Stroke Units (ISUs)?

A: All components within the New Ontario Stroke Unit Definition and Best Practice Standard document apply to acute stroke units and the acute portion of ISUs. This means that the recommended staffing ratios by the expert advisory task group (i.e., the Ontario Health – CorHealth Ontario Stroke Unit Task Group) apply to both acute stroke units and the acute portion of integrated stroke units:

- For the acute stroke unit rehabilitation team members, (i.e. physiotherapist, occupational therapist, speech language pathologist) a ratio of eight patients per provider should not be exceeded
- For day-time acute stroke unit beds nursing ratios, a ratio of four patients per nurse (i.e., Registered Nurse or Registered Practical Nurse) should not be exceeded

Q: How should staffing ratios be managed if a team uses acuity-based assignments?

A: The recommended nurse to patient ratios outlined under Component #2- Interprofessional Team Composition 3 represent a ***maximum ratio*** (i.e., maximum number of patients to provider) given the complexity of this patient population. Higher acuity stroke patients may require a lower patient to provider ratio e.g., 1 nurse to 3 patients.

In addition to considering nurse to patient ratios, assignments should also take into consideration the category of nursing (Registered Nurse [RN] or Registered Practical Nurse (RPN)) best suited to match with client's needs. Decisions related to which nursing category (Registered Nurse [RN] or Registered Practical Nurse [RPN]) is best suited to match with client's needs should align with the College of Nurse of Ontario's 3 Factor Framework (i.e., RN and RPN Practice: The Client, the Nurse and the Environment).

Q: Regarding Component #2 - Interprofessional Team Composition, what is recommended for teams that have a mixed caseload? How should their provider to patient ratio be acknowledged, as part of their caseloads that are not patients with stroke?

A: For teams that have a mixed caseload (i.e., team members provide care to multiple different patient populations, including stroke), the proportional representation of stroke on the caseload should be greater than or equal to 50% (i.e. the majority of each team member's caseload should be persons with stroke). For example, if 8 patients are being seen in total, and 6 of those patients are stroke patients, then the provider to patient ratio would then be 1:8, with the majority of the caseload (75%) being stroke.

Caseloads where therapists have higher patient ratios (e.g. 1:10 or greater), where 8 or more patients are stroke patients, would be challenged to adequately support the stroke patients due to the sequelae and complexity of most stroke patients.

Other

Q: Does this initiative include reviewing the number of bed types (e.g. acute/rehab and ISU) that exist in a district/region? Does this initiative involve restructuring of where stroke care is offered?

A: During Phase 1 of the initiative, Ontario Health – CorHealth gathered information on bed types by hospital, staffing, team processes and other resourcing requirements. In partnership with the Regional Stroke Networks and the Ontario Health Regions, the information will be reviewed and recommendations for better stroke unit access and implementation will be developed for these geographies.

Q: My site offers stroke rehabilitation and has not been designated as an Acute Stroke Unit. If we have the volumes and ability to implement an Integrated Stroke Unit, is there an approval process we need to undertake?

A: Decisions to expand current services are multi-faceted and require a regional and/or provincial planning approach that takes into consideration population need, resource availability, sustainability of current specialized stroke services, and timely access to best practice care. Hospitals interested in expanding services should engage their respective Regional Stroke Network teams and Ontario Health Region in the decision-making process, to discuss stroke service expansion opportunities and to ensure alignment of planning and resource allocation that addresses regional system needs.

Q: At my stroke unit hospital, the majority of our patient education is provided informally. Component #10 - Patient, Family and Caregiver Education in the document suggests that both informal and formal education delivery are required to meet the component. What types of formal education is expected?

A: For Component #10, formal education refers to the presence of established protocols/processes (e.g., list of education topics to be covered with the patients and team member responsible) **and** materials (e.g., information packages about the stroke team/unit, about stroke, treatment journey and next phase of care, life after stroke etc.). This information should be customized to the individual (e.g., age appropriate), and should be provided in such a way that accommodates for physical, communicative, and cognitive challenges related to the stroke.

Examples:

- Formal - all stroke patients receive an informational package, and the Physiotherapist is assigned to review the Fall Safety component with the patient.

- Informal - Patient asks during care interaction what the purpose of the medication is, and nurse leverages it as a teaching opportunity.

Both types of education should be available on the stroke unit.

Q: In rural areas, how do we balance the need to have dedicated stroke units that achieve the minimum volume but may not permit patients and families to receive care closer to home?

A: Minimum volumes support a critical mass of patients with stroke that enables expertise, quality and sustaining a stroke unit and will support better patient outcomes. At times, given the population in a geography, this may require transfer of patients to hospitals that are not their home hospital, to receive this specialized care.

As part of the Current State Assessment of stroke unit access in Ontario, Ontario Health-CorHealth interviewed persons with lived experience to understand their perspective on stroke unit access and care. A key theme that emerged from these interviews was that patients and families want and value access to specialized stroke care, including stroke units. When patients and families were asked if they would prefer care closer to home (without specialization) or specialized care further from home, all patients and families prioritized specialized care.

Patients and families did note that being further from family would be challenging. In these situations, the use of technology to support communication between patients and their families was encouraged (e.g., videoconferencing) and/or flexibility in terms of visiting hours. Information provided beforehand on local amenities (hotels, restaurants, etc.) was also appreciated by patients' family members as a way to alleviate stress in the event travel was required.

Health providers are encouraged to engage patients and families in discussion about the value of stroke unit care to support informed decision making when needing to transfer the patient to a stroke unit.

Q: Will there be a provincial measurement and monitoring framework to support Component #8 - Performance Measurement, Monitoring and Reporting? Will the measurement framework be developed to align with Accreditation Canada's standards language?

A: Phase 3 of the Stroke Unit Access & Quality Initiative will focus on enhancing quality of care and system performance, including the development of a measurement framework to understand and drive quality. Ontario Health – CorHealth will be working with key partners to co-design and develop the framework, including organizations such as Accreditation Canada.

Q: Who should I contact if I have questions or comments regarding the release of the New Ontario Stroke Unit Definition?

A: Please contact Ontario Health-CorHealth's Service Desk (OH-CORH_Service@ontariohealth.ca) for any inquiries related to the release of the document.

Appendix A: Summary of Staffing Recommendations

Description	Staffing Ratio Recommendations of the Dedicated Team
Rehabilitation Team – Acute Stroke Units and Integrated Stroke Units (ISU)	For the acute stroke unit and acute ISU beds, the rehabilitation team member ratio (i.e., physiotherapist, occupational therapist, speech language pathologist) should not exceed eight patients per provider (1:8)
Nursing	For the acute stroke unit and acute ISU beds, day-time nursing ratios should not exceed four patients per nurse (i.e., Registered Nurse or Registered Practical Nurse) (i.e., 1:4).
Acuity-based assignments (nursing)	The recommended nurse to patient ratios outlined under Component #2-Interprofessional Team Composition 3 represent a ***maximum ratio*** (i.e., maximum number of patients to provider) given the complexity of this patient population. Higher acuity stroke patients may require a lower patient to provider ratio e.g., 1 nurse to 3 patients.
Mixed Caseload	The proportional representation of stroke on the caseload should be greater than or equal to 50% (i.e., the majority of each team member's caseload should be persons with stroke).