Confidentiality Statement

The results of this stroke distinction survey are documented in the attached report, which was prepared by Accreditation Canada.

This report includes information obtained from the organization. Accreditation Canada relies on the accuracy of this information to conduct the survey and to prepare the report. Any alteration of this report would compromise the integrity of the accreditation process and is strictly prohibited.

While this confidential report is intended for the organization, Accreditation Canada encourages that the information herein be disclosed and promoted, in the interest of transparency, to stakeholders, clients and their community.
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About the Stroke Distinction Report

This report includes the official stroke distinction information based on the evaluation of the organization's stroke services.

The report can be used to communicate the success of stroke services to the public and staff.

Please visit the Organization portal (https://www3.accreditation-canada.ca/) for details of findings. The detail on the Organizational Portal will allow the organization, sites, and teams to review the stroke distinction results in detail and use the information for ongoing quality improvement initiatives and to monitor improvements.
Stroke Distinction Decision

Accreditation Canada is very pleased to recognize Mackenzie Health for earning Distinction in Stroke Services for the following site and program: Mackenzie Health, 10 Trench Street.

The national standards for Stroke Distinction were developed with input from key content experts and in collaboration with the Canadian Stroke Network. The Accreditation Canada Stroke standards are based on the best available evidence for stroke services, including the Canadian Stroke Strategy Best Practice Recommendations for Stroke Care (2008).

In order to achieve Stroke Services Distinction, you must have at least 75% of criteria rated as “Met” and at least 90% of high-priority criteria rated as “Met”. The following table summarizes your achievement of these thresholds.

<table>
<thead>
<tr>
<th>Standards</th>
<th>Achievement</th>
<th>Met</th>
<th>Unmet</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards</td>
<td>✔</td>
<td>174</td>
<td>3</td>
<td>177</td>
<td>98.3%</td>
</tr>
<tr>
<td>Excellence &amp; Innovation</td>
<td>✔</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>100.0%</td>
</tr>
<tr>
<td>Education</td>
<td>✔</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>100.0%</td>
</tr>
<tr>
<td>Protocols</td>
<td>✔</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Results Summary

Acute Stroke Services Standards

The following section of the report summarizes your achievement of the standards for acute stroke services, organized by standards subsection.

<table>
<thead>
<tr>
<th>Mackenzie Health</th>
<th>Criteria met</th>
<th>High priority criteria met</th>
<th>Unmet criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investing in comprehensive acute stroke services</td>
<td>4/4 100.0%</td>
<td>1/1 100.0%</td>
<td>0/4 0.0%</td>
</tr>
<tr>
<td>Engaging a prepared and proactive acute stroke services team</td>
<td>16/17 94.1%</td>
<td>2/2 100.0%</td>
<td>1/17 5.9%</td>
</tr>
<tr>
<td>Providing safe and appropriate hyper–acute and acute stroke services</td>
<td>34/35 97.1%</td>
<td>8/9 88.9%</td>
<td>1/35 2.9%</td>
</tr>
<tr>
<td>Helping clients and families live with stroke</td>
<td>24/24 100.0%</td>
<td>2/2 100.0%</td>
<td>0/24 0.0%</td>
</tr>
<tr>
<td>Maintaining accessible and efficient clinical information systems</td>
<td>7/7 100.0%</td>
<td>0/0</td>
<td>0/7 0.0%</td>
</tr>
<tr>
<td>Monitoring quality and achieving positive outcomes</td>
<td>7/7 100.0%</td>
<td>2/2 100.0%</td>
<td>0/7 0.0%</td>
</tr>
</tbody>
</table>
## Inpatient Stroke Rehabilitation Services

The following section of the report summarizes your achievement of the inpatient stroke rehabilitation services standards, organized by standards subsection.

<table>
<thead>
<tr>
<th>Mackenzie Health</th>
<th>Criteria met</th>
<th>High priority criteria met</th>
<th>Unmet criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investing in comprehensive stroke rehabilitation services</td>
<td>4/4 100.0%</td>
<td>1/1 100.0%</td>
<td>0/4 0.0%</td>
</tr>
<tr>
<td>Engaging a prepared and proactive acute stroke rehabilitation team</td>
<td>17/17 100.0%</td>
<td>4/4 100.0%</td>
<td>0/17 0.0%</td>
</tr>
<tr>
<td>Providing safe and appropriate inpatient rehabilitation services</td>
<td>32/32 100.0%</td>
<td>5/5 100.0%</td>
<td>0/32 0.0%</td>
</tr>
<tr>
<td>Helping clients and families live with stroke</td>
<td>16/17 94.1%</td>
<td>0/1 100.0%</td>
<td>1/17 5.9%</td>
</tr>
<tr>
<td>Maintaining accessible and efficient clinical information systems</td>
<td>7/7 100.0%</td>
<td>0/0</td>
<td>0/7 0.0%</td>
</tr>
<tr>
<td>Monitoring quality and achieving positive outcomes</td>
<td>6/6 100.0%</td>
<td>2/2 100.0%</td>
<td>0/6 0.0%</td>
</tr>
</tbody>
</table>
The Stroke Standards

Acute Stroke Services

This part of the report provides information on the delivery of high quality and safe acute stroke services. Specific priority process areas that are evaluated include: clinical leadership, competency, episode of care, and impact on outcomes.

Improvements
Following the on-site visit is the opportunity to address the unresolved criteria. Below are criteria that were rated not met:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Evaluator Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3.6) The team uses telehealth to increase access to stroke specialists.</td>
<td>This is not widely applicable to the district which is largely urban, but the stroke neurologist provides robust and just in time decision support to hospitals for patient redirection.</td>
</tr>
<tr>
<td>(6.8) The acute stroke team screens and documents the client’s swallowing ability using a simple valid and reliable bedside testing protocol as part of their initial assessment, and prior to initiating oral intake of medications, fluids, or food.</td>
<td>The Toronto Bedside Swallowing Screening Test© (TOR-BSST©) is not routinely carried out on TIA patients who are included in the “stroke denominator”. Data on TOR-BSST© assessment in the acute setting is not captured in acute-to-rehabilitation transition documentation resulting in low numerator/denominator ratio.</td>
</tr>
</tbody>
</table>
Clinical Leadership

Mackenzie Health used population information to identify needs and invested in an innovation project, an Interdisciplinary and Community Approach to Emergency Diversion through Stroke Prevention and Health Promotion (see Excellence and Innovation section), consistent with the Expanded Chronic Care Model. The designated stroke coordinator has responsibility for district stroke services, and is well supported by leadership and by the district stroke clinical nurse specialist, particularly with respect to oversight of dynamic patient flow. Robust partnership redirection and repatriation agreements are in place with two hospitals and the emergency medical system (EMS). Repatriation agreements (MOU’s) are required with other hospitals given certain ‘bypass liberties’ taken by EMS, and changing acute referral patterns. Community resource linkages/partnerships for specified populations reflecting the district demographic are in place. Community partnerships are the basis of the innovation project which moves from LHIN project funding to LHIN base program funding in fiscal year 2013-2014. Other community-based projects (stroke survivor, self-management, crisis management/referral (EMS), stroke awareness, health promotion, community service providers (Personal Support Workers), and caregiver support services) have been implemented. With respect to these latter services, a need is identified and addressed, but communication with respect to coordination/communication for increased referral is an area requiring attention.

Competency

Noteworthy is the high level of cooperation and integration of services across the emergency department (ED), the critical care unit (CCU), the intensive care unit (ICU), and the integrated stroke unit (ISU). Personnel on these units have well defined roles and responsibilities that are known to all services groups. Timely reports of team performance are posted on the units. Mackenzie Health is very ‘stroke aware’.

Episode of Care: Acute Care Services

Protocols and protocol education across the continuum are well implemented. Speech-language pathology support for swallowing assessment across the acute stroke service continuum is exemplary. Another noteworthy process is that after hours, the CCU nurse administers the Toronto Bedside Swallowing Screening Test© in the ED. Patient flow information support is also exemplary. Daily ‘bullet rounds’ on the ISU and “real time” ED huddles focused on tPA administration performance are noteworthy. The stroke clinical nurse specialist is highly vigilant with respect to bowel and bladder issues. The availability of a patient education care plan personalized folder is commended. Neurosurgery follow-up is coordinated with Sunnybrook Health Sciences Centre within a MOU; vascular surgery is available onsite supported by appropriate imaging services. The discharge planning process is highly proactive and time-appropriate, and follow-up community diabetes services are exemplary. The acute and rehabilitation team is highly integrated on the integrated stroke unit and the patient remains in the same bed through the acute and rehabilitation periods precluding the need for formal referral.

Decision Support

The clinical information system (CIS) is robust, usable, and provides informative decision support.

Impact on Outcomes

The needs-based innovation project is supported by the CIS. Real-time audit/huddles in the ED drive PDSA cycles for CQI and are exemplary.
**Inpatient Stroke Rehabilitation Services**

This part of the report provides information on the delivery of high quality and safe inpatient stroke rehabilitation services. Specific priority process areas that are evaluated include: clinical leadership, competency, episode of care, and impact on outcomes.

**Improvements**

Following the on-site visit is the opportunity to address the unresolved criteria. Below are criteria that were rated not met:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Evaluator Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1</td>
<td>The team screens and documents the client’s swallowing ability using a simple valid reliable testing protocol as part of their initial rehabilitation assessment. The SLP conducts a screen in acute care. The SLP managing the patient in acute care continues to be the treating SLP in rehab. A second formal assessment is not completed in rehab, rather the SLP progresses swallowing issues from acute admission to discharge from the system.</td>
</tr>
</tbody>
</table>

**Clinical Leadership**

Mackenzie Health conducted an analysis of its stroke bed map and realigned the beds to meet increased demand for inpatient rehabilitation. The organization collects and reviews data about the population it serves as is evident in the innovation project. The innovation project has addressed barriers to service in the community, providing increased access to early rehabilitation within the expanded Chronic Disease Management Model. Follow up research is planned to identify social determinants of health and inform development of content for the population’s different cultures. There is a dedicated stroke unit, staffed with an inter-professional team with expertise in stroke care. The team has a dedicated coordinator. The team provides care to patients during both the acute and rehabilitation or complex continuing care (CCC) component of their stay. This is an integrated unit combining acute, rehab and CCC beds which contributes to smooth patient flow between levels of care and providing access to the right level of care for each patient. The unit layout promotes patient care and safety. In a patient care redesign initiative and using LEAN methodology the team reconfigured the location of nursing areas, bringing staff closer to the patient. Huddles are held daily by the team. Safety crosses are posted on the unit to display incidence of falls.
Competency

Team member roles are posted in the unit hallway and are available to staff, patients and visitors. New staff members receive stroke specific orientation and training on the unit and through broader stroke specific education opportunities. New staff members are assigned a preceptor. The clinical nurse specialist (CNS) works closely with the team and provides both real time learning and formal learning around identified learning needs. The CNS and unit educator work together to meet the education needs of the unit. The team participates in Ontario Telemedicine Network sessions for education and has access to conferences and workshops that are specific to stroke. The organization supports learning through education funding.

Episode of Care: Inpatient Stroke Rehabilitation Services

The unit is dedicated to stroke care. Assessment begins in the ED and patients are progressed to the stroke unit when ready. Stroke patients admitted to an alternate location (medicine or CCU) are followed by the stroke team and stroke assessments/protocols are initiated. Psychiatry consultation is available across the hospital. Admission to the stroke unit is primarily from within the facility although other hospitals are able to access the stroke beds to facilitate care closer to home. Daily bullet rounds assist in monitoring patient progress; these are attended by a representative of the Community Care Access Centre (CCAC). There is frequent communication between team members. Patients participate in therapy as prescribed. Therapy is provided through a combination of direct provision by a health care professional, sessions with an occupational therapy assistant/physiotherapy assistant and group therapy sessions. The pharmacist works closely with the unit physicians to manage medications and dosage. The dietician works closely with patients/families. Speech-language pathology and specialized diabetic services meet the needs of stroke patients. There is a policy for assessment of depression in all stroke patients at admission and as needed, using PHQ-9. The Montreal Cognitive Assessment (MoCA) is used as the standard assessment for cognitive impairment. There is a corporate falls policy which is followed on the unit. Rehabilitation plans are developed for each patient and are based on goals. Discharge dates are estimated on admission and reviewed at weekly rounds. Rounds are interdisciplinary and comprehensive. Patients are aware of their discharge date and provide feedback to the team following a day or weekend pass. The CCAC provides in-home assessments as needed. Patient flow between acute care and rehabilitation is seamless. A discharge checklist is used. The patient care coordinator calls patients and families following discharge and uses the checklist to review the status of in-home services, medication management, follow-up tests and appointments as well as other issues the patient or family may identify.

Decision Support

There is an electronic system that captures patient information along the continuum of care. Information can be retrieved from one episode of care to another. This clinical information includes medical information, patient progress details and a clinical pathway. A decision support system produces data reports, for example CIHI NRS information, for analysis and to inform decision making. Acute care and rehab data can be linked in this system within the same report. Data is posted on the integrated stroke unit.

Impact on Outcomes

Clinical data are posted on the stroke unit. Utilization data were used to inform a decision to increase the number of rehabilitation beds on the stroke unit. The organization accesses information about comparator rehabilitation facilities through eNRS and monitors specific indicators.
Demonstrating Excellence and Innovation

Excellence and innovation are key components of effective stroke services. Accreditation Canada supports excellence and innovation by requiring stroke services to implement projects or initiatives that utilize the latest knowledge, integrate evidence, and align with best practice guidelines.

Below are the results from organization implementation of excellence and innovation in stroke services.

Project Name

Central LHIN Stroke Prevention Strategy - Stroke Prevention Strategy: An Interdisciplinary and Community Approach to Emergency Diversion through Stroke Prevention and Health Promotion.

Description

Mackenzie Health (MH) is the District Stroke Centre providing emergency, acute and rehabilitation services to York Region. In 2009, MH (then York Central Hospital), submitted a proposal to the Central Local Health Integration Network (C LHIN) for Aging at Home program funds to support the project: Stroke Prevention Strategy: An Interdisciplinary and Community Approach to Emergency Diversion through Stroke Prevention and Health Promotion. Since receiving this funding, the three-year project established Stroke Prevention Clinics (SPC) in all 5 of the C LHIN hospitals to provide rapid triage, assessment and interventions for patients presenting with Transient Ischemic Attack (TIA) and minor non-disabling stroke based on the immediate period of high risk for progression to stroke and the high recurrence rate for stroke. The model of care then proceeds to refer SPC patients to local Cardiovascular Rehabilitation (CVR) services based on research that shows comparable outcomes for stroke patients to the benefits for cardiac patients and the commonality of risk factors among both populations. The project has increased community capacity for CVR by planning and implementing two new CVR programs in partnership with Carefirst Seniors & Community Services (at Bayview Hill Community Centre) and with UHN-Toronto Rehab and York University (at Toronto track and Field Centre, York U campus). From CVR, the patients are further referred to chronic disease management services as needed (e.g. Diabetes education) and/or linked to appropriate community programs to support risk reduction, secondary stroke prevention and ongoing chronic disease management.

Comments

The Central LHIN Stroke Prevention Strategy innovation initiative entitled: An Interdisciplinary and Community Approach to Emergency Diversion through Stroke Prevention and Health Promotion is aligned precisely to The Ontario Stroke Network vision. The project targets appropriate resource utilization for cost benefit, was developed as a phased implementation, and has realistic deliverables targeting an outcome of reduced TIA admissions, which has now been achieved. The 2009-2013 period of development has seen a five-fold increase in Stroke Prevention Clinics, a three-fold increase in vascular rehabilitation sites, and a five-fold increase in chronic disease self-management program sites. Six blood pressure screening clinics (up from none in 2009) and six programs for clinician training for self-management (up from none in 2009) are now in existence. The success of this project has translated from Central LHIN project funding to base (program) funding commencing in the 2013-2014 fiscal year. It is a testimony to the tenets of implementation science where practice-informed policy, demonstration project, has translated to policy-enabled practice, program. This program is an exemplar well positioned for scaling to other LHIN's.
Client and Family Education about Stroke

Client, family and caregiver education is an integral part of stroke care that should be addressed at all stages across the continuum of stroke care. In order to achieve Stroke Services Distinction, the following targets for providing client and family education that is an integrated component of stroke care and is consistently documented must be met.

Comments:

The portfolio of materials available for client education is comprehensive. It consists of an education needs survey for the client (patient and family) which is reviewed by the team, documented, and directed to the appropriate resource(s). The resources include: Let’s talk about Stroke, eight internet presentations with evaluation checklist surveys, overall needs assessment for the client; client fact sheets, and education pamphlets (multiple languages reflective of the demographic), a Living with Stroke document, and client decision-making tools. Note is made of Mackenzie Health diabetes program, featured on its website, which serves clients in a number of languages.

During the tracer activity, a regular team meeting was held where patient progress was discussed, and documentation of components of care including education was carried out. One client discussed in the meeting had been interviewed earlier the surveyor; there were no team-client inconsistencies noted.
**Stroke Services Protocols**

Implementation of stroke protocols is a key component of excellence in stroke services. Using protocols helps stroke services remain consistent, high quality, and evidence based. Accreditation Canada supports excellence by identifying stroke protocols that are in place to achieve Stroke Distinction.

**Comments:**

There was an opportunity during the tracer activity to review all protocols and then see them implemented with emergency medical services (EMS) direct (bypass) arrival of an acute stroke patient. Door to CT imaging time was 10-12 minutes; the patient returned to the emergency department (ED) and was prepared for tPA administration some 15 minutes later and re-assessed. As symptoms had resolved (TIA), the decision not to proceed with tPA administration was made. Discharge of protocol and its documentation was appropriate and faithful to the requirements listed. During this time in the ED, a daily huddle with available ED staff focused on ED performance indicators including door-to-needle time for tPA. With respect to stroke, these huddles have been used for case by case rapid audit driving PDSA cycles for CQI to achieve targets. Noteworthy with respect to swallowing assessment for stroke patients in the ED is that the speech language therapist (SLP) makes twice daily rounds in the ED, and 24/7 coverage of the ED is provided with critical care unit (CCU) nurses charged with swallowing assessments in off hours.
Performance Measures

The following section provides a comparison of the performance measures (indicators) collected for stroke services and the measures collected nationally.

Core Performance Indicator Results - Acute Care Services

Below are the results from core performance indicators. Overall performance is based on data submitted by the organization for each indicator.

Mackenzie Health indicators:

Stroke / TIA mortality rates

Purpose and Rationale: In-hospital stroke mortality is a valid outcome measure for effectiveness of hyper-acute and acute stroke services.

Numerator: Number of stroke clients who died while in hospital (ED or inpatient) for an acute stroke event within the first 30 days of hospitalization.

Denominator: Number of all stroke clients who are admitted to the emergency department and/or acute inpatient services.

Threshold: 30 day in hospital all-cause mortality <22% of all stroke/TIA admissions

[Chart showing Mackenzie Health Results: April - Sept 2012, 2.1%]
Proportion of ischemic stroke clients who receive acute thrombolytic therapy (tPA)

Purpose and Rationale: All eligible clients with disabling acute ischemic stroke should be treated with intravenous tissue plasminogen activator (tPA).

Numerator: # of ischemic stroke clients who receive acute intravenous thrombolysis at stroke site.

Denominator: # of all ischemic stroke clients presenting to the stroke site.

Threshold: 7% of all ischemic stroke clients, regardless of time from stroke onset to tPA administration.

Chart 2

April - Sept 2012

Mackenzie Health Results 16.2%
Median time to administration of acute thrombolytic agent

Purpose and Rationale: All eligible clients with disabling acute ischemic stroke should be treated with intravenous tissue plasminogen activator (tPA). Time is brain and tPA should be administered as soon as possible to eligible stroke clients. Canadian Best Practice Recommendations for Stroke Care state that eligible clients should receive intravenous thrombolysis within one hour of arrival to hospital.

Numerator: sum [# minutes from ED arrival (registration) to start of administration of intravenous tPA].

Denominator: # of ischemic stroke clients presenting in ED or inpatient services who receive tPA through an intravenous route.

Threshold: 50% of all tPA clients have door to needle time of <60 minutes.
Portion of clients treated on stroke unit

Purpose and Rationale: Evidence shows better outcomes for clients who are treated on a designated stroke unit (defined as being a geographically defined unit with dedicated beds for stroke clients in acute care it has a core interdisciplinary team to formulate a treatment plan and provide care for stroke clients; teams meet regularly to monitor client progress and adjust treatment plans*). This indicator applies to acute inpatient care, inpatient rehabilitation settings, and clients managed on an integrated stroke unit (combines acute management and sub-acute intensive rehabilitation during a single stay). It is important to identify which model is relevant to the setting being monitored.

Numerator: # of stroke clients admitted to hospital and treated in an acute stroke unit, a rehabilitation stroke unit or an integrated stroke unit at any time during hospital stay.

Denominator: total # of stroke clients admitted to a hospital (TIA, ischemic, hemorrhage).

Threshold: Proportion of stroke clients managed on an acute stroke unit or integrated stroke unit for some part of acute inpatient stay ≥ 75%.
Length of stay in an acute care hospital setting for clients admitted following an acute stroke event

**Purpose and Rationale:** Length of stay is an important indicator of hospital efficiency and system responsiveness.

**Numerator:** total number of acute care hospital days for all stroke clients admitted to an acute care setting following an acute stroke event and discharged alive.

**Denominator:** total # of stroke clients discharged alive from an acute care hospital.

**Threshold:** Median acute services total length of stay $\leq$ 14 days.

![Chart 5](image)
Readmission to acute care for stroke related causes

Purpose and Rationale: Readmission is an important metric of effectiveness of stroke services.

Numerator: number of acute stroke and TIA clients that are discharged alive that are then readmitted to hospital with a new stroke or TIA diagnosis within 90 days of index acute care discharge.

Denominator: total # of stroke clients discharged alive from the emergency department or inpatient care following an index stroke event.

Threshold: 90 day readmission rate to acute services for stroke related causes less than or equal to 12%.
**Proportion of acute stroke clients discharged to inpatient rehabilitation**

**Purpose and Rationale:** Evidence supports the importance of stroke rehabilitation being provided in an inpatient setting where rehabilitation is formally coordinated, organized and delivered by a multidisciplinary team with expertise in stroke rehabilitation.

**Numerator:** # of stroke clients admitted to inpatient rehabilitation following discharge from acute services for a stroke.

**Denominator:** total # of stroke clients discharged alive from an acute services hospital following an index stroke event.

**Threshold:** Proportion of stroke clients admitted to inpatient rehabilitation ≥ 15% of all stroke patients discharged alive from acute care.

![Graph showing Mackenzie Health Results with a threshold of 14.1% in April - Sept 2012.](image-url)
Proportion of acute ischemic stroke and TIA clients prescribed antithrombotic therapy (acute stroke services)

**Purpose and Rationale:** Best practice evidence has shown that antithrombotic medications reduce the risk of further vascular events following an initial ischemic stroke or transient ischemic attack. This indicator applies to acute care (ED and inpatient) and inpatient rehabilitation.

**Numerator:** # of ischemic stroke/TIA clients who are discharged from the emergency department or inpatient acute services or inpatient rehabilitation services on antithrombotic therapy.

**Denominator:** total # of ischemic / TIA stroke clients discharged alive from the ED, acute services or inpatient rehabilitation.

**Threshold:** Proportion of ischemic stroke clients prescribed antithrombotic before discharge ≥ 90%.
Proportion of clients with initial dysphagia screening at admission (acute stroke services)

**Purpose and Rationale:** Difficulties in swallowing following a stroke occurs in more than half of all stroke clients and may lead to aspiration, dehydration and poor nutrition. This indicator applies to acute care (ED and inpatient) and inpatient rehabilitation.

**Numerator:** # of stroke clients who receive dysphagia screening in the ED, acute inpatient services or in inpatient rehabilitation.

**Denominator:** total # of stroke clients admitted to ED, acute inpatient services, or inpatient rehabilitation.

**Threshold:** Proportion of stroke / TIA clients with documentation of screening for dysphagia ≥ 90%.
Core Performance Indicator Results - Inpatient Rehabilitation Services

Below are the results from core performance indicators. Overall performance is based on data submitted by the organization for each indicator.

Porportion of clients treated on stroke unit (inpatient rehabilitation)

**Purpose and Rationale:** Evidence shows better outcomes for clients who are treated on a designated stroke unit (defined as being a geographically defined unit with dedicated beds for stroke clients in inpatient rehabilitation; it has a core interdisciplinary team to formulate a treatment plan and provide care for stroke clients; teams meet regularly to monitor client progress and adjust treatment plans*). This indicator applies to acute inpatient care, inpatient rehabilitation settings, and clients managed on an integrated stroke unit (combines acute management and sub-acute intensive rehabilitation during a single stay). It is important to identify which model is relevant to the setting being monitored.

**Numerator:** # of stroke clients admitted to hospital and treated in an acute stroke unit, a rehabilitation stroke unit or an integrated stroke unit at any time during hospital stay.

**Denominator:** total # of stroke clients admitted to a hospital (TIA, ischemic, hemorrhage).

**Threshold:** Proportion of stroke clients managed on an inpatient rehabilitation stroke unit or integrated stroke unit for some part of the inpatient rehabilitation stay $\geq 80\%$.
Length of stay in an inpatient rehabilitation setting for patients admitted following an acute stroke event

Purpose and Rationale: Length of stay is an important indicator of hospital efficiency and system responsiveness.

Numerator: total number of inpatient rehabilitation hospital days for all stroke clients admitted to an rehabilitation setting following an acute stroke event and discharged alive.

Denominator: total # of stroke clients discharged alive from an inpatient rehabilitation program.

Threshold: Median inpatient rehabilitation services total length of stay ≥ 14 days.
Proportion of acute with antithrombotic therapy (inpatient rehabilitation)

**Purpose and Rationale:** Best practice evidence has shown that antithrombotic medications reduce the risk of further vascular events following an initial ischemic stroke or transient ischemic attack. This indicator applies to acute care (ED and inpatient) and inpatient rehabilitation.

**Numerator:** # of ischemic stroke/TIA clients who are discharged from the emergency department or inpatient acute services or inpatient rehabilitation services on antithrombotic therapy.

**Denominator:** total # of ischemic / TIA stroke clients discharged alive from the ED, acute services or inpatient rehabilitation.

**Threshold:** Proportion of ischemic stroke clients prescribed antithrombotic before discharge ≥ 90%.
Proportion of clients with initial dysphagia screening at admission (inpatient rehabilitation)

**Purpose and Rationale:** Difficulties in swallowing following a stroke occurs in more than half of all stroke clients and may lead to aspiration, dehydration and poor nutrition. This indicator applies to acute care (ED and inpatient) and inpatient rehabilitation.

**Numerator:** # of stroke clients who receive dysphagia screening in the ED, acute inpatient services or in inpatient rehabilitation.

**Denominator:** total # of stroke clients admitted to ED, acute inpatient services, or inpatient rehabilitation.

**Threshold:** Proportion of stroke / TIA clients with documentation of screening for dysphagia ≥ 90%.
Next Steps

The organization is encouraged to use the findings in this report to prioritize areas for improvement. This is your opportunity to demonstrate a continued commitment to improving stroke services for clients and families.

As you know, Distinction requires an ongoing commitment to the highest levels of quality service. To maintain Distinction status, it is important to continue submitting performance indicator data in your portal. For additional information on submitting indicator data or on any other aspect of the program, contact your Accreditation Specialist.

Thank you for participating in the Stroke Services Distinction Program.