## **Ontario Stroke Report Card, 2017/18:**

## **South East Local Health Integration Network**

● Exemplary performance<sup>1</sup> Acceptable performance<sup>2</sup> A Poor performance<sup>3</sup> □ Data not available or benchmark not available

Indicator No.	Care Continuum Category	Indicator <sup>4</sup>	LHIN FY 2017/18 (2016/17)	Variance Within LHIN⁵ (Min–Max)	Provincial Benchmark <sup>6</sup>	High Performers <sup>7</sup>	
						Sub-region/Facility	LHIN
1 🛦	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	58.7% (62.0%)	57.8 - 59.3%	65.9%	Western Champlain sub-region	1, 11
2 🛦	Prevention of stroke	Annual age- and sex-adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.6 (1.5)	1.4 - 1.8	1.1	Oakville sub-region	7, 8, 6
3§□	Prevention of stroke	Risk-adjusted stroke/TIA mortality rate at 30 days (per 100 patients).	12.2 (11.1)	9.5 - 28.1	-	-	11
4 🛦	Prevention of stroke	Proportion of ischemic stroke/TIA inpatients aged 65 and older with atrial fibrillation who filled a prescription for anticoagulant therapy within 90 days of discharge from acute care.	71.0% (67.8%)	62.5 - 86.7%	85.6%	East Mississauga sub-region	5, 12
5	Prevention of stroke	Proportion of ischemic stroke inpatients who received carotid imaging.	83.3% (85.3%)	33.3 - 92.6%	93.0%	Thunder Bay Regional Health Sciences Centre	14, 3
6 •	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes). Targete: 30 minutes	31.5 (42.0)	24.0 - 65.0	33.0	Kingston Health Sciences Centre – Kingston General Site	10
7⁵ ●	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA). Targete: >12%	14.4% (15.1%)	9.8 - 21.8%	17.7%	London Middlesex sub-region	11, 4
8§	Acute stroke management	Proportion of stroke/TIA patients treated on a stroke unit <sup>9</sup> at any time during their inpatient stay. Target <sup>9</sup> : >75%	80.5% (76.7%)	74.8 - 88.8%	81.8%	Quinte sub-region	3, 10
9	Prevention of stroke	Proportion of ischemic stroke/TIA patients discharged from the ED and referred to secondary prevention services.	79.1% (74.7%)	0.0 - 100.0%	95.1%	Hamilton Health Sciences Corp - Juravinski	None
10§▲	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	33.0 (32.1)	0.0 - 72.8%	8.2%	Bluewater Health, Sarnia	3
11§▲	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation. Target*: >30%	30.2% (27.9%)	14.5 - 36.0%	47.8%	Lambton sub-region	1
12§ 🗌	Stroke rehabilitation	Proportion of acute stroke (excluding TIA) patients with mild disability (AlphaFIM > 80) discharged home.	75.9% (80.0%)	73.9 - 84.1%	*	*	14, 3
13§ ▲	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	11.0 (11.0)	4.0 - 15.0	5.0	Quinte Health Care – Belleville General Site	None
14§	Stroke rehabilitation	Median number of minutes per day of direct therapy received by inpatient stroke rehabilitation patients. Targete: 180 minutes/day	74.9 (71.5)	72.4 - 80.0	107.6	West Park Healthcare Centre	None
15§ ▲	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	50.7% (51.3%)	40.0 - 62.4%	86.6%	Providence Healthcare	12
16▲	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	1.0 (0.9)	0.8 - 1.6	1.6	Providence Healthcare	3, 12
17 •	Stroke rehabilitation	Mean number of home and community care rehab visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation in 2016/17–2017/18.	15.3 (12.9)	-	13.1	South East Home and Community Care	10, 3
18§▲	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe stroke (RPG 1100 or 1110).	35.7% (45.7%)	20.0 - 40.9%	56.2%	Grand River Hospital Corp- Freeport Site	None
19§	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	3.9% (6.4%)	1.0 - 6.5%	1.9%	Guelph-Puslinch sub-region	None
20§ □	Reintegration	Age- and sex-adjusted readmission rate at 30 days for patients with stroke/TIA for all diagnoses (per 100 patients). Targete: 10.0	6.6 (5.1)	5.2 - 11.0	-	-	10

<sup>\*</sup>Benchmark has not been specified for this indicator.

Hospital Service Accountability Agreement indicator, 2015/16

- Data not available

§ Contributes to QBP performance



<sup>&</sup>lt;sup>1</sup> Benchmark achieved or performance within 5% absolute/relative difference from the benchmark.

<sup>&</sup>lt;sup>2</sup> Performance at or above the 50th percentile and greater than 5% absolute/relative difference from the benchmark.

<sup>&</sup>lt;sup>3</sup> Performance below the 50th percentile.

<sup>&</sup>lt;sup>4</sup> Facility-based analysis (excluding indicators 1, 2, 4, 7, 8, 11 and 19) for patients aged 18–108. Indicators are based on CIHI data. Low rates are desired for indicators 2, 3, 6, 10, 13, 19 and 20.

<sup>&</sup>lt;sup>5</sup> Excludes sub-regions or facilities with fewer than six patients.

<sup>&</sup>lt;sup>6</sup> Top benchmark achieved between 2015/16 and 2017/18. Benchmarks were calculated using the ABC methodology (Weissman et al. J Eval Clin Pract 1999; 5(3):269–81) on sub-region or facility data.

<sup>&</sup>lt;sup>7</sup> Sub-region/Facility: Highest performer among acute care institutions treating more than 100 stroke patients per year, rehabilitation facilities admitting more than 62 stroke patients per year, or sub-regions with at least 30 stroke patients per year. LHIN: Top two with exemplary performance.

<sup>8</sup> Targets based on international, national and provincial targets, please refer to full report for details.

<sup>&</sup>lt;sup>9</sup> The revised definition was developed with the consensus of Ontario Stroke Network regional directors (February 2014). There were 16 stroke units in 2013/14, 21 in 2014/15, 28 in 2015/16, 35 in 2016/17, and 39 in 2017/18

#### **Stroke Progress Report, 2017/18 compared to 2014/15-2016/17:**

## **South East Local Health Integration Network**

■ Progressing Well¹
■ Progressing²
▲ Not Progressing³
□ Data not available

Indicator No.	Care Continuum Category	Indicator <sup>4</sup>	LHIN FY 2017/18 (Previous 3-Year	Variance Within LHIN <sup>5</sup> 2017/18 (2014/15)		Greatest Improvement <sup>6</sup>	
			Average)	Min	Max	Sub-region/Facility	LHIN
1 🛦	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	58.7% (61.0%)	57.8% (57.3%)	59.3% (63.6%)	District of Thunder Bay sub- region	5,11
2 🛦	Prevention of stroke	Annual age– and sex–adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.6 (1.5)	1.4 (1.4)	1.8 (1.7)	Cochrane sub-region	4
3§	Prevention of stroke	Risk-adjusted <sup>7</sup> stroke/TIA mortality rate at 30 days (per 100 patients).	12.0 (12.8)	8.8 (0.0)	22.5 (36.8)	-	12
4	Prevention of stroke	Proportion of ischemic stroke/TIA inpatients aged 65 and older with atrial fibrillation who filled a prescription for anticoagulant therapy within 90 days of discharge from acute care.	71.0% (67.7%)	62.5% (57.1%)	86.7% (100.0%)	Elgin sub-region	7, 5
5	Prevention of stroke	Proportion of ischemic stroke inpatients who received carotid imaging.	83.3% (80.6%)	33.3% (11.1%)	92.6% (85.6%)	Georgian Bay General	14,9
6	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes). Targete: 30 minutes	31.5 (51.0)	24.0 (42.0)	65.0 (60.0)	Windsor Regional Hospital -Ouellette	10, 9
7§	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA). Target <sup>8</sup> : >12%	14.4% (13.7%)	9.8% (7.6%)	21.8% (19.6%)	Chatham City Centre sub- region	1, 13
8§ <b>•</b>	Acute stroke management	Proportion of stroke/TIA patients treated on a stroke unit <sup>9</sup> at any time during their inpatient stay. Target*: >75%	80.5% (72.4%)	74.8% (53.3%)	88.8% (78.5%)	Windsor sub-region	2, 14
9 •	Prevention of stroke	Proportion of ischemic stroke/TIA patients discharged from the ED and referred to secondary prevention services.	79.1% (70.8%)	0.0% (4.2%)	100.0% (94.2%)	North Bay Regional Health Centre	14, 10
10 <sup>§</sup> ▲	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	33.0% (26.0%)	0.0% (0.0%)	72.8% (42.6%)	Windsor Regional Hosp- Ouellette	1
11 <sup>§</sup>	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation. Target*: >30%	30.2% (28.2%)	14.5% (19.4%)	36.0% (36.0%)	Essex South Shore sub- region	None
12 <sup>§</sup> ▲	Stroke rehabilitation	Proportion of acute stroke (excluding TIA) patients with mild disability (AlphaFIM > 80) discharged home.	75.9% (77.7%)	73.9% (63.6%)	84.1% (83.3%)	St. Joseph's Hamilton	9, 11
13⁵ ▲	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	11.0 (9.0)	4.0 (5.0)	15.0 (13.0)	Bruyere Continuing Care	11, 14
14⁵□	Stroke rehabilitation	Median number of minutes per day of direct therapy received by inpatient stroke rehabilitation patients. Target*: 180 minutes/day	74.9 (-)	72.4 (60.7)	80.0 (84.4)	-	-
15§	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	50.7% (47.2%)	40.0% (45.6%)	62.4% (48.1%)	St. Joseph of Hotel Dieu	12, 5
16	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	1.0 (0.8)	0.8 (0.7)	1.6 (0.9)	Brant Community Healthcare System	5, 7, 13, 4*
17	Stroke rehabilitation	Mean number of home and community care rehab visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation in 2016/17–2017/18.	15.3 (13.4)	-	-	Waterloo Wellington Home and Community Care	11, 5
18⁵ ▲	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe stroke (RPG $1100 \text{ or } 1110$ ).	35.7% (44.5%)	20.0% (18.5%)	40.9% (53.5%)	Southlake Regional Health Centre	11, 8
19§	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	3.9% (5.9%)	1.0% (3.0%)	6.5% (7.7%)	District of Rainy River sub- region	10
20⁵ ▲	Reintegration	Age– and sex–adjusted <sup>7</sup> readmission rate at 30 days for patients with stroke/TIA for all diagnoses (per 100 patients). Target*: 10.0	6.5 (6.2)	5.1 (0.0)	10.5 (13.4)	-	None

Hospital Service Accountability Agreement indicator, 2015/16

- Data not available

§ Contributes to QBP performance

<sup>&</sup>lt;sup>9</sup> The revised definition was developed with the consensus of Ontario Stroke Network regional directors (February 2014). There were 16 stroke units in 2013/14, 21 in 2014/15, 28 in 2015/16, and 35 in 2016/17, and 39 in 2017/18



<sup>&</sup>lt;sup>1</sup> Statistically significant improvement.

<sup>&</sup>lt;sup>2</sup> Performance improving but not statistically significant.

<sup>&</sup>lt;sup>3</sup> No change or performance decline.

<sup>&</sup>lt;sup>4</sup> Facility-based analysis (excluding indicators 1, 2, 4, 7, 8, 11 and 19) for patients aged 18–108. Indicators are based on CIHI data. Low rates are desired for indicators 2, 3, 6, 10, 13, 19 and 20.

<sup>&</sup>lt;sup>5</sup>Excludes sub-regions or facilities with fewer than six patients.

<sup>&</sup>lt;sup>6</sup> Sub-region/Facility: Greatest improvement from 2014/15 among acute care institutions treating more than 100 stroke patients per year, rehabilitation facilities admitting more than 62 stroke patients per year, or sub-regions with at least 30 stroke patients per year. LHIN: Top two with greatest statistically significant improvement from 2014/15.

 $<sup>^{7}</sup>$  The 2014/15-2017/18 LHIN rate is used in calculating the LHIN risk-adjusted rate.

<sup>&</sup>lt;sup>8</sup> Targets based on international, national and provincial targets, please refer to full report for details.

# **Ontario Stroke Report Card, 2017/18**

▲ Not Progressing³

Limited Data

Progressing<sup>2</sup>

#### Local Health Integration Networks (LHINs)

1. Erie St. Clair

2. South West

3. Waterloo Wellington 7. Toronto Central

10. South East 11. Champlain

6. Mississauga Halton

12. North Simcoe Muskoka

8. Central

5. Central West

13. North East

4. Hamilton Niagara Haldimand Brant

9. Central East

14. North West

Indicator No.	Care Continuum Category	Indicator <sup>4</sup>	Ontario FY 2017/18 (2016/17)	Variance Across LHINs (Min–Max)	Provincial Benchmark <sup>5</sup>	High Performers⁵	
						Sub-region/Facility	LHIN
1 •	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	60% (59.2%)	54.9% - 64.2%	65.9%	Western Champlain sub-region	1, 11
2 🛦	Prevention of stroke	Annual age- and sex-adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.3 (1.3)	1.1 -1.9	1.1	Oakville sub-region	7, 8, 6
3§	Prevention of stroke	Risk-adjusted stroke/TIA mortality rate at 30 days (per 100 patients).	10.5 (10.7)	9.9 -17.1	-	-	11
4 •	Prevention of stroke	Proportion of ischemic stroke/TIA inpatients aged 65 and older with atrial fibrillation who filled a prescription for anticoagulant therapy within 90 days of discharge from acute care.	74.2% (72.0%)	64% - 82.1%	85.6%	East Mississauga sub-region	5, 12
5	Prevention of stroke	Proportion of ischemic stroke inpatients who received carotid imaging.	84.4% (82.7%)	81.7% - 92.4%	93.0%	Thunder Bay Regional Health Sciences Centre	14, 3
6	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes). Target': 30 minutes	45.0 (47.0)	31.5 - 327.0	33.0	Kingston Health Sciences Centre  - Kingston General Site	10
7§	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA). Target?: >12%	12.2% (12.5%)	8.1% - 15.6%	17.7%	London Middlesex sub-region	11, 4
8§	Acute stroke management	Proportion of stroke/TIA patients treated on a stroke unit <sup>®</sup> at any time during their inpatient stay. Target?: >75%	52.8% (45.6%)	16.0% - 80.6%	81.8%	Quinte sub-region	3, 10
9 •	Prevention of stroke	Proportion of ischemic stroke/TIA patients discharged from the ED and referred to secondary prevention services.	78.8% (77.3%)	57.1% - 88.0%	95.1%	Hamilton Health Sciences Corp - Juravinski	None
10§▲	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	31.1% (30.7%)	12.6% - 43.5%	8.2%	Bluewater Health, Sarnia	3
11§▲	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation. Target?: >30%	33.0% (34.8%)	23.9% - 44.8%	47.8%	Lambton sub-region	1
12§	Stroke rehabilitation	Proportion of acute stroke (excluding TIA) patients with mild disability (AlphaFIM > 80) discharged home.	74.2% (72.6%)	55.2% - 93.0%	*	*	14, 3
13§	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	8.0 (9.0)	6.0 -14.0	5.0	Quinte Health Care – Belleville General Site	None
14§□	Stroke rehabilitation	Median number of minutes per day of direct therapy received by inpatient stroke rehabilitation patients. Target?: 180 minutes/day	66.7 (64.8)	21.2 -92.8	107.6	West Park Healthcare Centre	None
15§	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	67.3% (65.8%)	46.2% -89.1%	86.6%	Providence Healthcare	12
16	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	1.1 (1.1)	0.9 -1.7	1.6	Providence Healthcare	3, 12
17 🔵	Stroke rehabilitation	Mean number of home and community care rehab visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation in 2016/17–2017/18.	8.4 (8.2)	5.0 -15.3	13.1	South East Home and Community Care	10, 3
18§▲	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe stroke (RPG 1100 or 1110).	38.7% (42.3%)	27.9% - 50.0%	56.2%	Grand River Hospital Corp- Freeport Site	None
19§ ▲	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	7.0% (6.7%)	2.6% -12.8%	1.9%	Guelph-Puslinch sub-region	None
20§▲	Reintegration	Age- and sex-adjusted readmission rate at 30 days for patients with stroke/TIA for all diagnoses (per 100 patients). Target?: 10.0	7.8 (7.6)	6.6 -9.7	-	-	10

<sup>\*</sup>Benchmark has not been specified for this indicator.

Hospital Service Accountability Agreement indicator, 2015/16

- Data not available

§ Contributes to QBP performance

Progressing Well<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Statistically significant improvement.

<sup>&</sup>lt;sup>2</sup> Performance improving but not statistically significant.

<sup>&</sup>lt;sup>3</sup> No change or performance decline.

<sup>&</sup>lt;sup>4</sup> Facility-based analysis (excluding indicators 1, 2, 4, 7, 8, 11 and 19) for patients aged 18 -108. Indicators are based on CIHI data. Low rates are desired for indicators 2, 3, 6, 10, 13, 19 and 20.

<sup>&</sup>lt;sup>5</sup> Top benchmark achieved between 2015/16 and 2017/18. Benchmarks were calculated using the ABC methodology (Weissman et al. J Eval Clin Pract 1999; 5(3):269 -81) on sub-Region or facility data.

<sup>&</sup>lt;sup>6</sup> Sub-region/Facility: Highest performer among acute care institutions treating more than 100 stroke patients per year, rehabilitation facilities admitting more than 62 stroke patients per year, or sub-regions with at least 30 stroke patients per year. LHIN: Top two with exemplary performance.

<sup>&</sup>lt;sup>7</sup> Targets based on international, national and provincial targets, please refer to full report for details.

<sup>&</sup>lt;sup>8</sup> The revised definition was developed with the consensus of Ontario Stroke Network regional directors (February 2014). There were 16 stroke units in 2013/14, 21 in 2014/15, 28 in 2015/16, 35 in 2016/17 and 39 in 2017/18.