#### **Ontario Stroke Report Card, 2016/17:**

# **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	Indicator⁴	LHIN FY 2016/17 (2015/16)	Variance Within LHIN⁵ (Min–Max)	Provincial Benchmark <sup>6</sup>	High Performers <sup>7</sup>	
						Sub-LHIN/Facility	LHIN
1 •	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	62.1% (59.5%)	48.4 - 78.0%	65.9%	Essex Sub-LHIN	1, 11
2	Prevention of stroke	Annual age- and sex-adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.5 (1.6)	1.4 - 2.5	1.2	Oakville Sub-LHIN	6, 8, 7, 11
3§□	Prevention of stroke	Risk-adjusted stroke/TIA mortality rate at 30 days (per 100 patients).	11.3 (11.7)	10.3 - 63.8	-	-	7
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.	69.1% (70.1%)	46.7 - 100%	85.5%	Southeast Mississauga Sub-LHIN	None
5	Prevention of stroke	Proportion of ischemic stroke inpatients who received carotid imaging.	85.1% (79.4%)	42.9 - 91.4%	92.4%	Bluewater Health, Sarnia	5
6	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes). Target*: 30 minutes	42.0 (52.0)	33.0 - 72.0	33.0	The Ottawa Hospital, Civic	11
7⁵ ●	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA). Target*: >12%	15.4% (13.2%)	3.4 - 29.4%	17.7%	Ottawa East Sub-LHIN	11, 10
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>8</sup> : >75%	77.0% (72.3%)	60.9 - 90.0%	80.6%	Urban Guelph Sub-LHIN	3, 10
9	Prevention of stroke	Proportion of ischemic stroke/TIA patients discharged from the ED and referred to secondary prevention services.	74.7% (76.8%)	26.3 - 94.7%	95.1%	Hamilton Health Sciences Corp., Juravinski	None
10 <sup>§</sup> ▲	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	32.2% (23.5%)	0.0 - 65.9%	8.2%	Bluewater Health, Sarnia	None
11§▲	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation. Target%: >30%	28.5% (29.6%)	4.4 - 50.0%	47.8%	Chatham-Kent Sub-LHIN	1
12§□	Stroke rehabilitation	Proportion of acute stroke (excluding TIA) patients with mild disability (AlphaFIM > 80) discharged home.	80.0% (75.2%)	74.8 - 93.0%	-	-	14, 3
13§ ▲	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	11.0 (8.0)	6.0 - 15.0	5.0	Pembroke Regional Hospital	None
14§	Stroke rehabilitation	Median number of minutes per day of direct therapy received by inpatient stroke rehabilitation patients. Targete: 180 minutes/day	71.3 (71.0)	59.2 - 85.2	101.7	West Park Healthcare Centre	None
15§ ▲	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	52.2% (43.4%)	26.7 - 64.3%	85.4%	Providence Healthcare	3
16 🛦	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	0.8 (0.8)	0.6 - 1.1	1.6	Grand River Hospital Corp., Freeport	3, 12
17 •	Stroke rehabilitation	Mean number of CCAC visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation in 2015/16–2016/17.	12.8 (13.3)	-	12.4	Waterloo Wellington CCAC	3, 10
18§	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe stroke (RPG 1100 or 1110).	43.3% (45.6%)	36.8 - 46.9%	58.7%	Lakeridge Health, Oshawa	3
19§	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	6.0% (5.4%)	0.0 - 13.3%	1.9%	Urban Guelph Sub-LHIN	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	5.3 (7.1)	0.0 - 13.7	-	-	10, 6

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.

 $<sup>^2</sup>$  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-LHINs or facilities with fewer than six patients.

<sup>&</sup>lt;sup>6</sup> Top benchmark achieved between 2014/15 and 2016/17. Benchmarks were calculated using the ABC methodology (Weissman et al. J Eval Clin Pract 1999; 5(3):269–81) on sub-LHIN or facility data.

<sup>&</sup>lt;sup>7</sup> Sub-LHIN/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-LHINs 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, and 35 in 2016/17.

### **Stroke Progress Report, 2016/17 compared to 2013/14-2015/16:**

# **South East Local Health Integration Network**

■ Progressing Well<sup>1</sup> Progressing<sup>2</sup> Mot Progressing<sup>3</sup>

gressing<sup>3</sup> Data not available

Indicator No.	Care Continuum Category	Indicator <sup>4</sup>	LHIN FY 2016/17 (Previous 3-Year	Variance Within LHIN <sup>5</sup> 2016/17 (2013/14)		Greatest Improvement <sup>6</sup>	
			Average)	Min	Max	Sub-LHIN/Facility	LHIN
1	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	62.1% (61.5%)	48.4% (45.0%)	78.0% (79.5%)	Tyendinaga, Napanee Sub- LHIN	11
2 🛦	Prevention of stroke	Annual age– and sex–adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.5 (1.3)	1.4 (1.3)	2.5 (2.1)	Milton Sub-LHIN	None
3⁵ ●	Prevention of stroke	Risk-adjusted <sup>7</sup> stroke/TIA mortality rate at 30 days (per 100 patients).	11.7 (15.0)	10.2 (14.7)	48.8 (42.7)	-	10, 2
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.	69.1% (67.9%)	46.7% (44.4%)	100% (88.2%)	Cochrane Sub-LHIN	6, 7
5 🔵	Prevention of stroke	Proportion of ischemic stroke inpatients who received carotid imaging.	85.1% (76.4%)	42.9% (33.3%)	91.4% (84.8%)	Brockville General Hospital	10, 11
6 •	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes). Target <sup>e</sup> : 30 minutes	42.0 (53.0)	33.0 (47.0)	72.0 (67.0)	Thunder Bay Regional Health Sciences Centre	14, 1
7 <sup>§</sup>	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA). Target*: >12%	15.4% (13.2%)	3.4% (0.0%)	29.4% (25.0%)	Tyendinaga, Napanee Sub- LHIN	2, 1
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%	77.0% (60.2%)	60.9% (3.8%)	90.0% (79.5%)	Thunder Bay City Sub-LHIN	14, 2
9 •	Prevention of stroke	Proportion of ischemic stroke/TIA patients discharged from the ED and referred to secondary prevention services.	74.7% (62.8%)	26.3% (5.9%)	94.7% (90.9%)	North Bay Regional Health Centre	10, 1
10⁵ ▲	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	32.2% (21.4%)	0.0% (0.0%)	65.9% (42.0%)	Trillium Health Partners, Credit Valley	None
11 <sup>§</sup> ▲		Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation. Target*: >30%	28.5% (28.9%)	4.4% (2.9%)	50.0% (52.2%)	Timiskaming Sub-LHIN	None
12 <sup>§</sup>	Stroke rehabilitation	Proportion of acute stroke (excluding TIA) patients with mild disability (AlphaFIM > 80) discharged home.	80.0% (-)	74.8% (-)	93.0% (-)	-	-
13⁵ ▲	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	11.0 (9.0)	6.0 (7.0)	15.0 (15.0)	Mackenzie Health	4, 14
14 <sup>§</sup>	Stroke rehabilitation	Median number of minutes per day of direct therapy received by inpatient stroke rehabilitation patients. Targete: 180 minutes/day	71.3 (-)	59.2 (-)	85.2 (-)	-	-
15 <sup>§</sup>	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	52.2% (45.2%)	26.7% (28.6%)	64.3% (70.0%)	Hotel Dieu Shaver	5, 12
16 🔺	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	0.8 (0.8)	0.6 (0.7)	1.1 (1.0)	Trillium Health Partners, Credit Valley	5, 4, 6, 7
17 🔺	Stroke rehabilitation	Mean number of CCAC visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation in 2015/16 - 2016/17.	12.8 (13.9)	-	-	Waterloo Wellington CCAC	3, 13
18 <sup>§</sup> ▲	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe stroke (RPG 1100 or 1110).	43.3% (45.8%)	36.8% (34.8%)	46.9% (50.8%)	Grand River Hospital Corp., Freeport	11
19§	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	6.0% (6.8%)	0.0% (0.0%)	13.3% (18.2%)	Perth Sub-LHIN	11
20§	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	5.0 (6.9)	0.0 (3.2)	14.2 (10.5)	-	12, 13

Hospital Service Accountability Agreement indicator, 2015/16

- Data not available

§ Contributes to QBP performance



<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-LHINs or facilities with fewer than six patients.

Sub-LHIN/Facility: Greatest improvement from 2013/14 among acute care institutions treating more than 100 stroke patients per year, rehabilitation facilities admitting more than 62 stroke patients per year, or sub-LHINs with at least 30 stroke patients per year. LHIN: Top two with greatest statistically significant improvement from 2013/14.

 $<sup>^{7}</sup>$  The 2013/14-2016/17 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.

<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.

# **Ontario Stroke Report Card, 2016/17**

▲ Not Progressing³

☐ Limited Data

Progressing<sup>2</sup>

#### Local Health Integration Networks (LHINs)

1. Erie St. Clair

2. South West

3. Waterloo Wellington

6. Mississauga Halton 7. Toronto Central

11. Champlain 12. North Simcoe Muskoka

5. Central West

13. North East

4. Hamilton Niagara 8. Central Haldimand Brant 9. Central East

14. North West

10. South East

Indicator No.	Care Continuum Category	Indicator <sup>4</sup>	Ontario FY 2016/17 (2015/16)	Variance Across LHINs (Min–Max)	Provincial Benchmark <sup>5</sup>	High Performers <sup>6</sup>	
						Sub-LHIN/Facility	LHIN
1	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	59.2% (58.8%)	53.2 - 63.9%	65.9%	Essex Sub-LHIN	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 - 1.8	1.2	Oakville Sub-LHIN	6, 8, 7, 11
3§	Prevention of stroke	Risk-adjusted stroke/TIA mortality rate at 30 days (per 100 patients).	10.8 (11.1)	10.9 - 16.4	-	-	7
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.	72.0% (71.3%)	64.9 - 78.7%	85.5%	Southeast Mississauga Sub-LHIN	None
5	Prevention of stroke	Proportion of ischemic stroke inpatients who received carotid imaging.	82.2% (81.9%)	76.1 - 87.4%	92.4%	Bluewater Health, Sarnia	5
6	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes). Target': 30 minutes	47.0 (50.0)	35.0 - 125.5	33.0	The Ottawa Hospital, Civic	11
7§ •	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA). Target7: >12%	12.5% (12.3%)	8.9 - 15.5%	17.7%	Ottawa East Sub-LHIN	11, 10
8§	Acute stroke management	Proportion of stroke/TIA patients treated on a stroke unit <sup>®</sup> at any time during their inpatient stay. Target <sup>7</sup> : >75%	45.6% (43.3%)	10.5 - 82.9%	80.6%	Urban Guelph Sub-LHIN	3, 10
9	Prevention of stroke	Proportion of ischemic stroke/TIA patients discharged from the ED and referred to secondary prevention services.	77.3% (73.9%)	50.2 - 87.8%	95.1%	Hamilton Health Sciences Corp., Juravinski	None
10§ ▲	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	30.7% (26.8%)	14.2 - 41.0%	8.2%	Bluewater Health, Sarnia	None
11§▲	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation. Target?: >30%	35.2% (35.5%)	28.5 - 44.8%	47.8%	Chatham-Kent Sub-LHIN	1
12§	Stroke rehabilitation	Proportion of acute stroke (excluding TIA) patients with mild disability (AlphaFIM > 80) discharged home.	72.6% (71.8%)	62.0 - 92.2%	-	-	14, 3
13§ ▲	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	9.0 (8.0)	6.0 - 15.0	5.0	Pembroke Regional Hospital	None
14§	Stroke rehabilitation	Median number of minutes per day of direct therapy received by inpatient stroke rehabilitation patients. Target?: 180 minutes/day	64.8 (60.0)	23.8 - 92.3	101.7	West Park Healthcare Centre	None
15§	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	66.4% (62.6%)	41.0 - 85.5%	85.4%	Providence Healthcare	3
16	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	1.1 (1.1)	0.8 - 1.6	1.6	Grand River Hospital Corp., Freeport	3, 12
17 •	Stroke rehabilitation	Mean number of CCAC visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation in 2015/16–2016/17.	8.2 (8.2)	5.1 - 15.7	12.4	Waterloo Wellington CCAC	3, 10
18§▲	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe stroke (RPG 1100 or 1110).	41.2% (42.2%)	29.0 - 56.3%	58.7%	Lakeridge Health, Oshawa	3
19§	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	6.8% (6.3%)	2.5 - 10.8%	1.9%	Urban Guelph Sub-LHIN	None
20§	Reintegration	Age- and sex-adjusted readmission rate at 30 days for patients with stroke/TIA for all diagnoses (per 100 patients). Target <sup>7</sup> : 10.0	7.0 (7.6)	5.3 - 11.2	-	-	10, 6

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>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 2014/15 and 2016/17. Benchmarks were calculated using the ABC methodology (Weissman et al. J Eval Clin Pract 1999; 5(3):269 -81) on sub-LHIN or facility data.

<sup>&</sup>lt;sup>6</sup> Sub-LHIN/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 -LHINs with at least 30 stroke patients per year. LHIN: Top two with exemplary performance.

 $<sup>^{7}</sup>$  Targets based on international, national and provincial targets, please refer to full report for details.

<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 and 35 in 2016/17.