

CorHealth COVID-19 Stroke Stakeholder Forum Meeting #10

January 15, 2021 | 2:00 pm - 3:00 pm

Teleconference: (647) 951-8467 or Long Distance: 1 (844) 304 - 8099

Conference ID: 442718997#

Agenda

Time	Description	Purpose	Presenter / Facilitator
2:00	1. Welcome• Meeting Objectives• System Updates	Information	Sheila Jarvis
2:10	2. Data Presentation –Trends in Stroke Activity and OutcomesOpen Discussion	Information/ Discussion	Mirna Rahal
2:30	 3. Community Rehab Survey Findings Overview – Rehabilitative Care Alliance Charissa Levy, Executive Director, Rehabilitative Care Alliance Rebecca Ho, Project Manager, Rehabilitative Care Alliance Facilitated Discussion 	Information/ Discussion	Charissa Levy Rebecca Ho
2:55	4. Next Steps	Information	Dr. Leanne Casaubon







Welcome

SHEILA JARVIS

Meeting Objectives

- To provide information on key CorHealth and System updates.
- To share an update and facilitate discussion on the most recent data related to emergency room presentation of stroke and access to stroke treatment during the COVID-19 pandemic.
- To hear and facilitate dialogue on the key findings of the Rehabilitative Care Alliance's Community Rehab Survey.

Housekeeping Reminders:

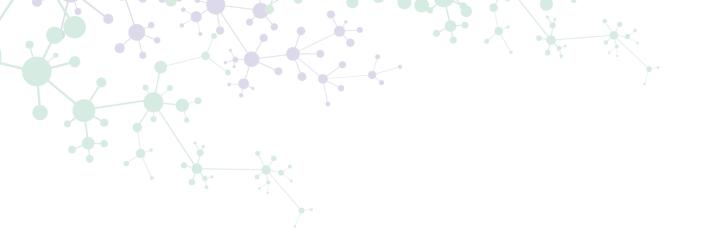
- Please ensure that you are on mute, not on hold, when you are not speaking on the call
- Please be aware that when the call is put on hold, we often hear hold music or persistent beeping



System Updates

- Ontario Health (OH) released a memo on December 15th urging hospitals to create capacity of staffed adult acute inpatient beds for COVID-19
 - https://www.corhealthontario.ca/OH-Memo-Actions-for-Optimizing-Care-(Dec-15).pdf
- A follow up memo was released on January 7th: Further Actions for Optimizing Care for All Patients
 - https://www.corhealthontario.ca/OH-Memo-Further-Actions-for-Optimizing-Care-FINAL_Jan-7.pdf
- Key points from the January 7th memo:
 - As the number of patients with COVID-19 requiring critical care increases, OH projects that the number of patients requiring care could exceed the number of ICU beds available over the next two months
 - Hospitals with currently unoccupied adult ICU bed capacity must reserve approximately one-third
 of that capacity for ICU transfers from hospitals who are exceeding their capacity these beds will be
 used to receive ICU transfers from hospitals exceeding their capacity
 - All hospitals must be ready to accept patient transfers through the Ontario Critical Care COVID-19
 Command Centre (ICU patients) OR regional COVID-19 response structure/IMS (inpatient), when
 directed







Data Presentation: Trends in Stroke Activity and Outcomes

MIRNA RAHAL

Outline

1. Activity Trends

- Stroke ED visits and inpatient admissions
- Stroke type mix
- Stroke severity

2. Access to stroke services

- ED visit Timeliness
- Access to tPA, EVT and stroke unit care

3. Stroke Outcomes

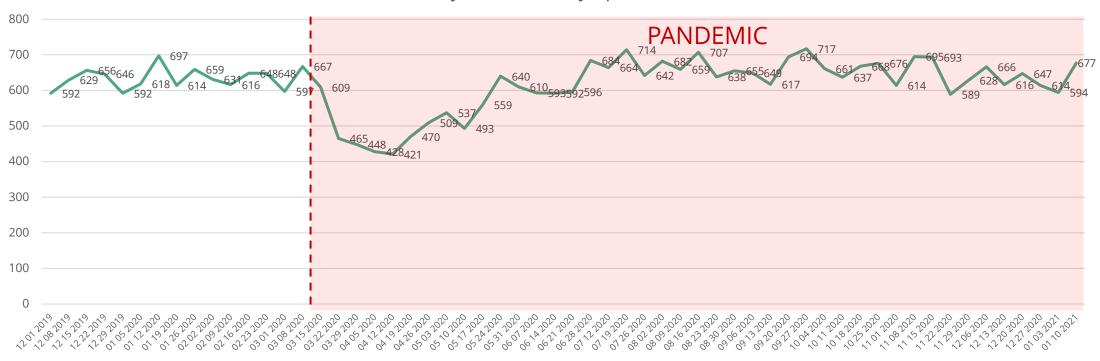
- ED stroke mortality
- Inpatient stroke mortality



eCTAS Stroke Related ED Presentations

Dec 1st 2019 – January 10th 2020

Extremity Weakness / Symptoms of CVA

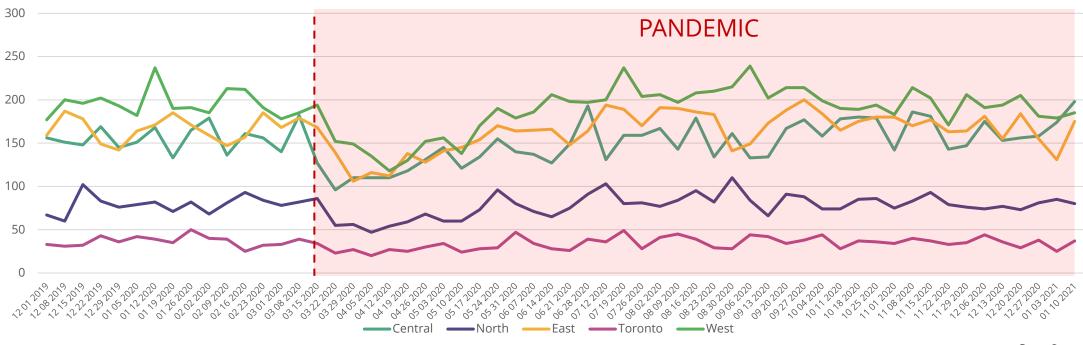


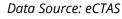
Data Source: eCTAS



Note: The week of July 04th data is excluded from all the eCTAS stroke graphs. Due to a technical disruption on July 4th, a selection of Ontario Health products including eCTAS were unavailable for an extended period of time. As a result, daily triage volume is significantly understated (estimated ~40% lower) in all eCTAS reporting for July 4th. The week containing August 7th, data is excluded from all graphs, a portion of eCTAS hospitals were unavailable for an extended period of time. As a result, ~1000 records were not transmitted to eCTAS.

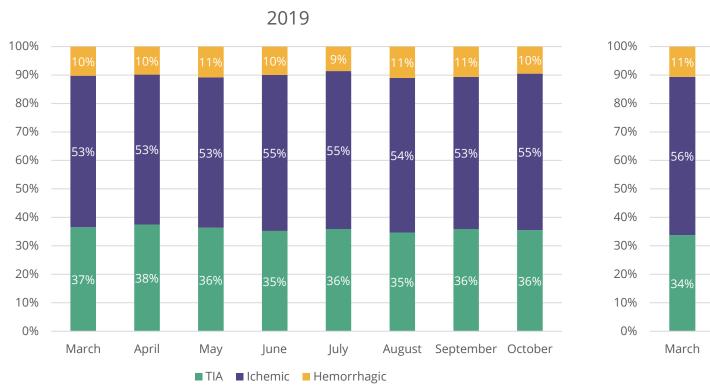
eCTAS Stroke Related ED Presentations – By OH Region Dec 1st 2019 – January 10th 2020

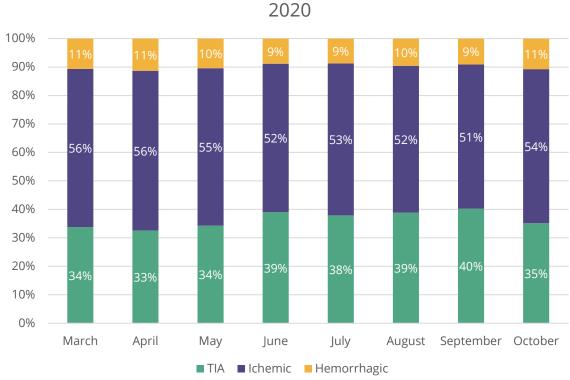






Stroke ED Visits By Stroke Type



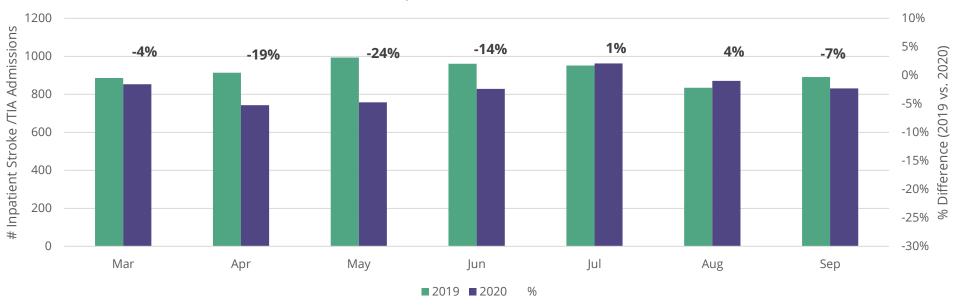


Data Source: NACRS, IDS Hamilton (March to October– 2019, 2020)



Trend in Stroke Admissions

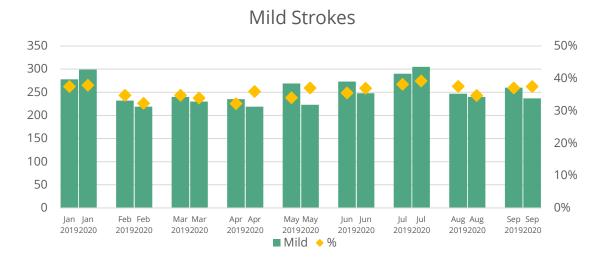




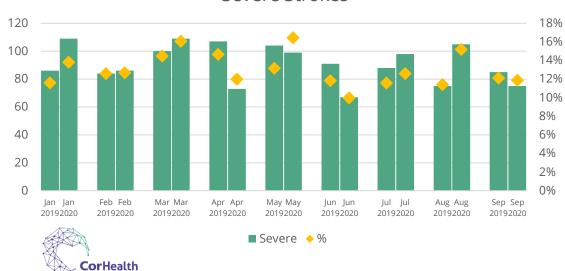
Data Source: DAD, IDS Hamilton (March to September- 2019, 2020)



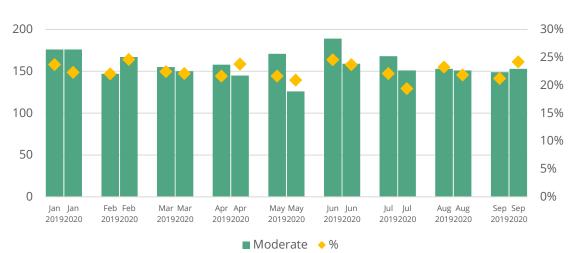
Changes in Stroke Severity Hemorrhagic and Ischemic Strokes Combined



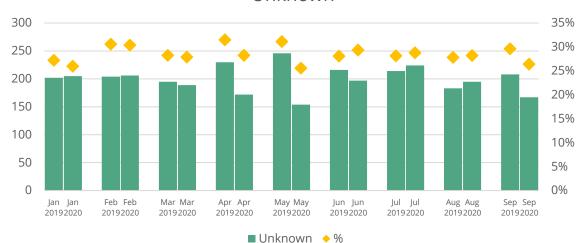
Severe Strokes



Moderate Strokes

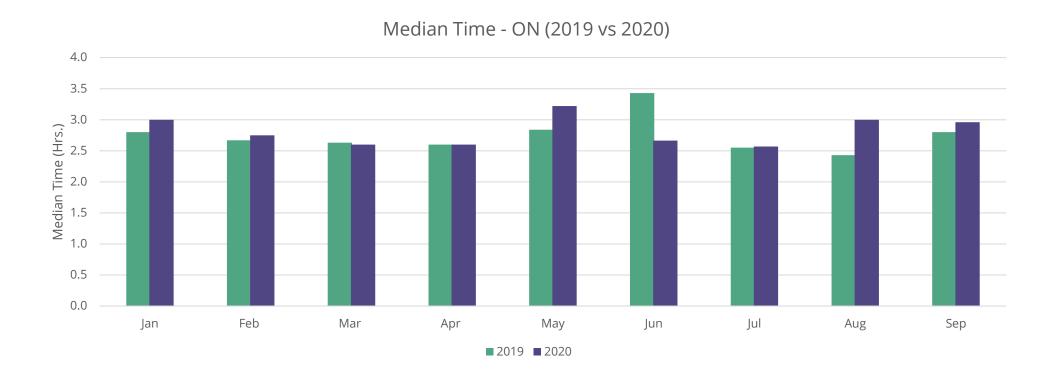


Unknown



Data Source: DAD, IDS Hamilton January to September – 2019, 2020

Median Time from Stroke Onset to ED Registration



(Hemorrhagic, Ischemic, TIA)

Data Source: IDS Hamilton January to September – 2019, 2020



Proportion of Ischemic Stroke Patients who Received Acute Thrombolytic Therapy (tPA)



Data Source: DAD & NACRS, IDS Hamilton January to September – 2019, 2020



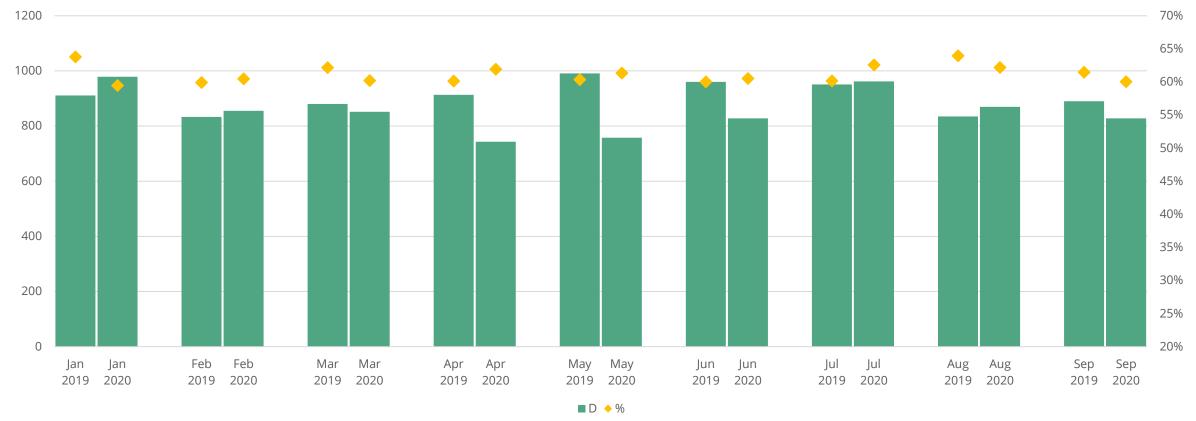
Denominator: Ontario residents aged 18 to 108, with an ED registration or inpatient acute discharge in the month indicated, with a most responsible diagnosis of ischemic stroke. Only the first stroke/TIA visit for the patient in the fiscal year is included (which could be an ED or inpatient acute care visit). If the first visit is an ED visit immediately followed by an inpatient visit, the inpatient visit is used. Palliative patients and in-hospital strokes are excluded. Note that the results are reported by the ED or acute inpatient institution of visit.

Numerator: The number of patients in the denominator who recieved acute thrombolytic therapy during their visit.

CorHealth Note: FY 2021 Q2 : TC LHIN , ESC LHIN , MH LHIN , SW LHIN have fewer records than usual –interpret with caution.

Ontario FY 19/20 Q3 HNHB LHIN, FY 1920 Q2 : SW LHIN

Proportion of Admitted Stroke/TIA Patients Treated in an Acute Stroke Unit for any Portion of their Stay



Data Source: DAD & NACRS, IDS Hamilton January to September – 2019, 2020

Denominator: Ontario residents, age 18 to 108, who were urgently admitted with a most responsible diagnosis of stroke/TIA, and discharged during the quarter indicated. Only the first stroke/TIA inpatient acute visit within each fiscal year for a patient is included. Palliative patients and in-hospital strokes are excluded.

Numerator: Patients in the Denominator, who were admitted to an acute stroke unit at one point during their stay (based on the Project 340 data).

Data Source: DAD

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Proportion of Ischemic Stroke Patients that Received EVT

		March	April	May	June	July	Aug	Sept	Oct
2019	# Ischemic Stroke Cases	857	825	868	886	889	785	785	631
2013	% Received EVT	6%	6%	8%	7%	8%	9%	6%	6%
2020	# Ischemic Stroke Cases	693	584	683	682	790	733	728	706
2020	% Received EVT	8%	7%	8%	6%	8%	8%	7%	7%

Data Source: DAD, IDS Hamilton (March to October – 2019, 2020)

Note: The table above represents the intervention occurrence count, i.e. counts the total number of qualifying interventions (per filter criteria), and not the total cases or number of DAD records.

Ischemic Stroke cases includes unscheduled Ischemic Stroke ED visits with (MAIN_PROBLEM) = I63 (including all sub-codes except I63.6), I64 or H34.1 THP not operational from March to July 2019 and hence the March to July 2020 results excludes THP

UHN and THP excluded for September and October 2019 (Data not submitted for Sep and Oct 2020)

HSN results reduced from March and April 2020 for comparability with 2019 as they started operating in March 2020



ED Stroke Mortality

	2019		2020		
	Stroke ED Visits	% Deaths	Stroke ED Visits	% Deaths	
MAR- MAY	5,967	0.2%	4,335	0.3%	
JUN-AUG	5,744	0.2%	5,187	0.1%	
SEP-OCT	3,199	0.3%	2,809	0.1%	
TOTAL	14,910	0.1%	12,331	0.1%	

*Hemorrhagic, Ischemic, TIA

Data Source: NACRS, IDS Hamilton (March to October – 2019, 2020)



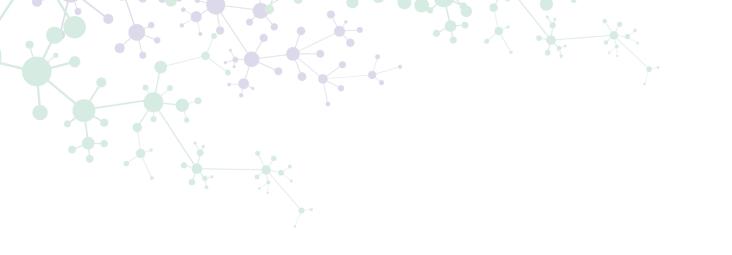
Inpatient Stroke Mortality

	2019		2020		
	Inpatient Stroke Admissions	% Deaths	Inpatient Stroke Admissions	% Deaths	
Jan	912	9%	981	11%	
Feb	835	10%	857	10%	
Mar	886	11%	853	11%	
Apr	914	8%	743	11%	
May	994	9%	758	11%	
Jun	961	8%	829	9%	
Jul	952	7%	963	8%	
Aug	835	10%	871	8%	
Sep	730	9%	732	10%	

*Hemorrhagic, Ischemic, TIA

Data Source: DAD, IDS Hamilton (Jan to September – 2019, 2020)







Advancing cardiac, stroke and vascular care

Questions?





Community Rehab Survey Findings Overview – Rehabilitative Care Alliance

CHARISSA LEVY, EXECUTIVE DIRECTOR, REHABILITATIVE CARE ALLIANCE

REBECCA HO, PROJECT MANAGER, REHABILITATIVE CARE ALLIANCE



Community Rehab Capacity During the COVID-19 Pandemic: Survey Highlights

CorHealth Stroke Forum January 15, 2021



Background & Objectives

- ▲ During the initial stages of the pandemic in the spring of 2020, there were significant decreases in access to community-based rehabilitation. In the late summer, as surgeries began to resume the need to ensure sufficient capacity for patients requiring post-acute rehabilitation was identified.
- ▲ The Rehabilitative Care Alliance collected data on pre-COVID, current, and future anticipated rehab capacity from providers of publicly funded community rehabilitation services in order to facilitate this cross-continuum planning. Surveys were distributed mid-September and returned mid-October, 2020.
- ▲ The data collected provide valuable insights to inform ongoing regional planning for community-based rehab services during the pandemic.
- ▲ The collected data also highlight the important role that community-based rehab plays in the Ontario health system.



Engagement and Distribution

Engagement Strategy

The RCA secretariat engaged and obtained input on the survey questions from:

- CorHealth
- Ontario Physiotherapy Association
- Ontario Health Shared Services
- Service Provider Organizations
- Ontario Hospital Association

Broad Distribution Approach

The RCA secretariat implemented a broad distribution strategy, sharing the survey:

- with regional vice presidents and directors and clinical leads
- via OHA and OPA newsletters and the RCA distribution list
- directly to community physiotherapy clinics and service provider organizations



Key Highlights from Surveys - Ambulatory

- ▲ 161 ambulatory rehab clinics responded to the survey and at the time of the survey 94% indicated that they were operating at reduced capacity
- ▲ The average operating capacity at the time of the survey reported across all respondents was 57%
- ▲ Ambulatory rehab clinic respondents indicated that patient volumes for Q1 FY20/21 were 35% of the average quarterly patient volumes for FY19/20.
- A Respondents indicated that they are not expecting to return to 100% capacity this fiscal year. On average, ambulatory rehab respondents indicated that clinics are expecting to operate at 81% capacity
- ▲ 55% of responding organizations indicated implementing a waitlist strategy. Wait list strategy development was more frequently reported in hospital-based organizations. Among those developing a waitlist strategy, moving toward virtual care was the most common strategy employed. Triaging patients for care was the second most commonly cited approach



Key Highlights - Ambulatory

- ▲ The two most frequently cited factors that have had the largest impact on overall capacity are: full or partial clinic closures and patients declining services (either in person or virtual depending on what was offered). As clinics opened, the need to physically distance patients was also frequently cited as having a significant impact on capacity
- ▲ With the exception of pediatrics, the proportion of visits delivered in-person (as compared to virtually) was reduced
- ▲ There was greater variation in moving toward virtual care regionally than by population group. The regional variability appeared to correlate with COVID-19 rates i.e., those regions with higher COVID-19 cases, were generally the regions with fewer in person visits



Key Highlights – In-home Rehab Capacity

- ▲ 24 in-home service delivery organizations responded to the survey, each organization indicating multiple regions served
- ▲ 48% of responding organizations delivering in-home rehab services indicated that they were operating at reduced capacity
- ▲ Of those who reported operating at reduced capacity, the average operating capacity reported for physiotherapy and occupational therapy services was 73%
- ▲ 'Clients declining in-person rehab' and 'Limiting in-person in-home visits to only urgent or emergent cases' were the two most commonly cited factors impacting capacity



Average Quarterly Volume of Patients by LHIN

LHIN Volume – Total across all organizations	Patient Volume Avg Q FY1920		Relative %
01 - Erie St. Clair	11280	1802	16%
02 - South West	18619	8225	44%
03 - Waterloo Wellington	2566	469	18%
04 - Hamilton Niagara Haldimand Brant	18240	11241	62%
05 - Central West	2238	528	24%
06 - Mississauga Halton	465	290	62%
07 - Toronto Central	13986	3594	26%
08 - Central	3953	1178	30%
09 - Central East	3480	1450	42%
10 - South East	1504	129	9%
11 - Champlain	23097	8101	35%
12 - North Simcoe Muskoka	2534	687	27%
13 - North East	12083	3667	30%
14 - North West	1180	572	48%
Ontario Total	115225	41933	36%

- ▲ LHIN patient volumes for ambulatory rehab were significantly reduced for Q1 FY20/21 when compared to quarterly volumes for FY19/20
- ▲ 17 organizations reported zero cases during Q1 FY20/21 as a result of full closure due to the pandemic
- ▲ Organizations in South East
 LHIN were impacted most,
 reporting only 9% of patient
 volumes in Q1 FY20/21 relative
 to the average quarterly
 volumes for FY19/20



Quarterly Volume Changes by Population (Ontario)

Volume – Total across all	Patient Volume Avg	Patient Volume	Relative %
organizations by population	Q FY19/20	Q1 FY20/21	
Pulmonary	10076	1329	13%
Pediatric	18800	4280	23%
Geriatric	34925	8818	25%
Orthopedic, other	62605	18837	30%
Orthopedic, Bundled Care populations	53462	16658	31%
ABI	2503	807	32%
Cardiovascular	19890	7570	38%
Other neuro populations	45598	17757	39%
Stroke	35783	15286	43%
Other	32822	14248	43%
Amputee	34042	14816	44%

- COVID-19 has had a significant impact on patient volumes in Q1 FY20/21 across all patient populations
- ▲ Clinics that provide pulmonary rehab services have been most impacted by the COVID-19 pandemic, with patient volumes in Q1 FY20/21 only 13% of the average quarterly volume in FY19/20
- Recall, "Other" populations include chronic pain, ALS, complex chronic conditions, SCI and other populations



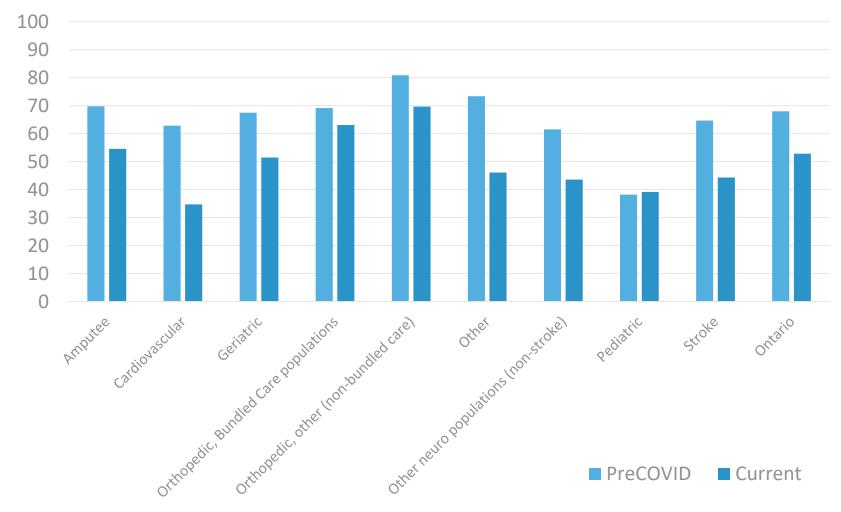
Reduced Operating Capacity and Current Capacity by Population (Ontario)

% of Orgs Currently Operating at	Reduced Capacity	Current Operating Capacity
ABI	60%	57%
Amputee	93%	67%
Cardiovascular	69%	59%
Geriatric	90%	66%
Orthopedic, Bundled Care populations	86%	64%
Orthopedic, other	87%	63%
Other	83%	64%
Other neuro populations	85%	63%
Pediatric	79%	68%
Pulmonary	86%	51%
Stroke	85%	59%

Current operating capacity is an average across organizations who indicated that they provide service to those populations. This includes those organizations who reported no reduced capacity and those who indicated a complete closure



Proportion of In-person Visits by Population



- The proportion of in-person visits has been reduced compared to pre-COVID
- By population, 'other', stroke and cardiovascular rehab patients have moved toward virtual visits at a higher rate than other populations
- ▲ "Other" populations include chronic pain, ALS, complex chronic conditions, SCI and other populations



Key Highlights - Stroke and Cardiovascular

- ▲ 29% of all responding ambulatory rehab organizations indicated that they provide rehab services for stroke patients with 18% of responding organizations reporting providing cardiovascular rehab services
- ▲ Clinics that reported providing care for stroke patients indicated that patient volumes in Q1 FY20/21 were only 43% of the average quarterly volumes in FY19/20. Among clinics that provide cardiovascular rehab services, patient volumes in Q1 FY20/21 were 38% of the average quarterly volumes in FY19/20
- ▲ At the time of the survey, 85% of clinics providing stroke rehab and 69% of clinics providing cardiovascular rehab reported operating at reduced capacity, with both types of clinics reporting an average of 59% capacity at the time of the survey



Key Highlights - Stroke and Cardiovascular

- ▲ Clinics providing stroke or cardiovascular rehab reported providing a higher proportion of virtual visits at the time of the survey when compared to pre-COVID.
- ▲ For clinics that provide rehab services for cardiovascular and stroke patients, a greater proportion of virtual visits were conducted when compared to other populations.
- ▲ Of the 5 clinics that reported wait times for their stroke programs, in every case, wait times for rehab in 20/21 were increased as compared to 19/20



Key Highlights - Stroke and Cardiovascular

- A Responses to the various qualitative questions posed throughout the survey were generally not dependent on the services that clinics provide.
 - O In other words, generally, the approach to managing the wait list, and what kinds of practices would be retained after the pandemic or what practices they would do differently in wave 2, etc. were not different from the full sample set when looking at those clinics that provide services to stroke or cardiovascular patients.
 - One exception: respondents from clinics that provide stroke rehab services indicated more frequently than other clinics that in future waves/phases that they would focus on reducing the impact of redeployment on the clinic and maintain their capacity to serve patients



Next Steps & Discussion

- ▲ The RCA wishes to thank all those who helped to promote and distribute the survey and the many organizations that responded.
- ▲ The RCA will be consulting stakeholders to determine the need to update survey results in spring 2021.

Discussion Questions

- How have regions responded to the OH memo released on December 15th on optimizing care through COVID-19 transmission scenarios?
 - Broadening rehab admission criteria
 - Utilizing ESD models
 - Continuing with virtual care
- Have any regions developed a regional approach for stroke rehabilitation?
- Are stroke rehab programs able to meet the current demand of referrals? (e.g. FTE capacity)
 - What strategies are being employed to mitigate wait lists?
 - What is happening to patients who aren't being seen?
- Are stroke rehab programs seeing a change in referral volumes?







Next Steps

DR. LEANNE CASAUBON

Next Steps and Wrap Up

- Next COVID-19 Stroke Forum Meeting: March (tbd)
 - Please email Shelley Sharp if there are items you would like to raise or see addressed at future COVID-19 Stroke Forums
 - shelley.sharp@corhealthontario.ca

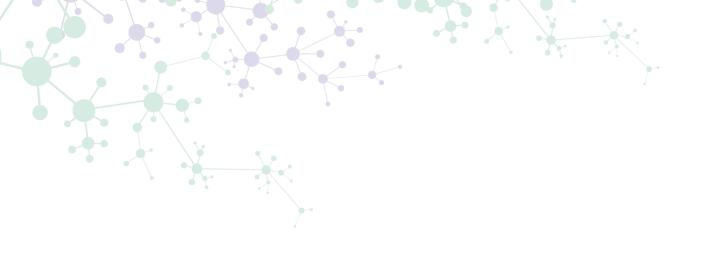






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Appendix





Appendix A. Stroke Activity IDS Hamilton Data

MONTHLY NACRS AND DAD DATA, MARCH TO OCTOBER 2020 COMPARED TO 2019

DATA EXTRACTION: JANUARY 2020

IDS Facts

HSPs within the following geographic regions are IDS Partners:

- 01 Erie St. Clair LHIN
- 02 South West LHIN
- 03 Waterloo Wellington LHIN
- 04 Hamilton Niagara Haldimand Brant LHIN
- 05 Central West LHIN (One HSP)
- 06 Mississauga Halton LHIN
- 07 Toronto Central LHIN
- 11 Champlain LHIN (One HSP)
- 12 North Simcoe Muskoka LHIN (One HSP)
- 13 North East LHIN (One HSP)



Proportion of Ischemic Stroke Patients who Received Acute Thrombolytic Therapy (tPA)



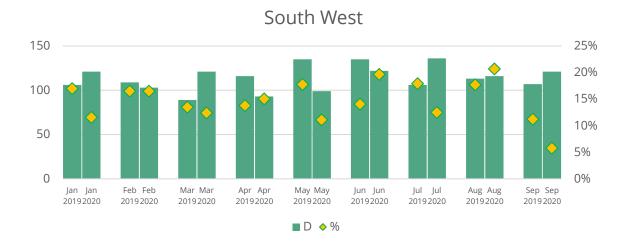


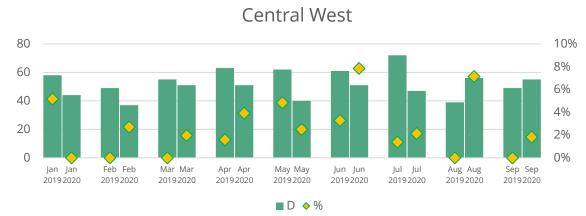
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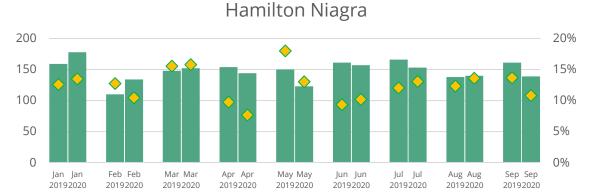
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Note: FY 2021 Q2 : TC LHIN, ESC LHIN, MH LHIN, SW LHIN have incomplete results due to missing data submissions. FY 19/20 Q3 HNHB LHIN, FY 1920 Q2 : SW LHIN

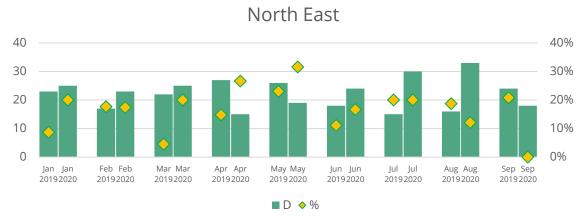
Proportion of Ischemic Stroke Patients who Received Acute Thrombolytic Therapy (tPA)







■ D ◆ %



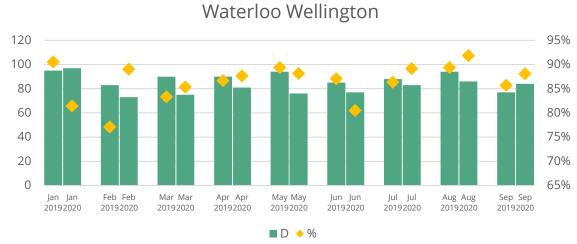


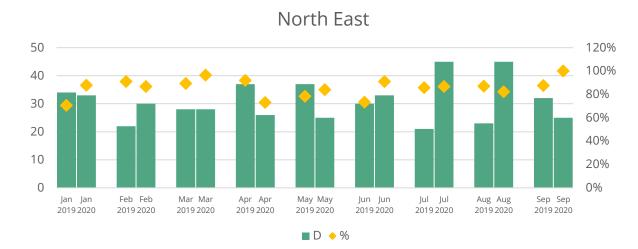
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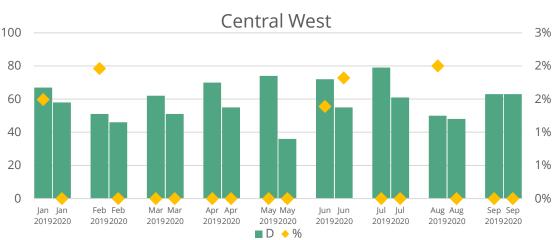
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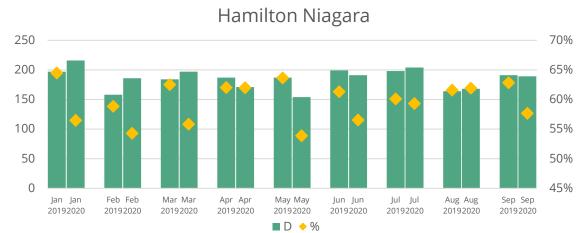
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Proportion of Admitted Stroke/TIA Patients Treated in an Acute Stroke Unit for any Portion of their Stay









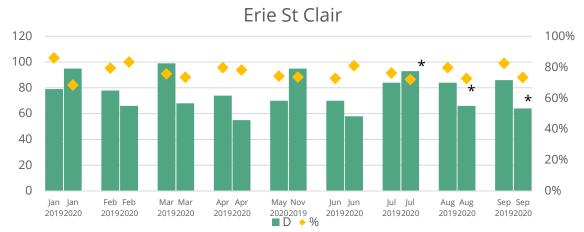
Fewer records than usual have been submitted for the following institutions and fiscal quarters: WILLIAM OSLER HEALTH SYSTEM-PEEL MEMORIAL FY20/21 Q1 & Q2 WILLIAM OSLER HEALTH SYSTEM-ETOBICOKE - FY20/21 Q1 WILLIAM OSLER HEALTH SYSTEM-CIVIC SITE - FY20/21 Fewer records than usual have been submitted for HAMILTON HLTH SCIENCES CORP-WEST LINCOLN - FY19/20 Q2

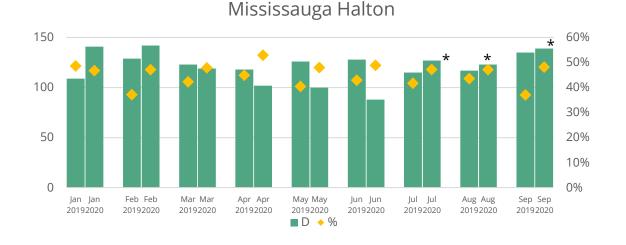
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Numerator: Patients in the Denominator, who were admitted to an acute stroke unit at one point during their stay (based on the Project 340 dat Data Source: DAD, IDS Hamilton

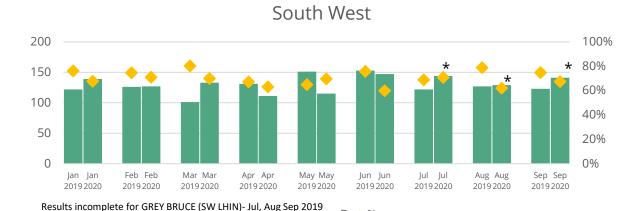
Data Source: DAD

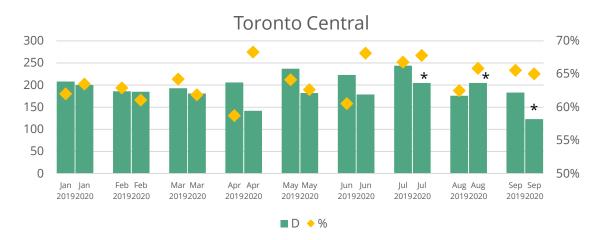
Proportion of Admitted Stroke/TIA Patients Treated in an Acute Stroke Unit for any Portion of their Stay





^{*}Fewer records than usual submitted for Jul Aug Sep 2020 due to missing data submissions







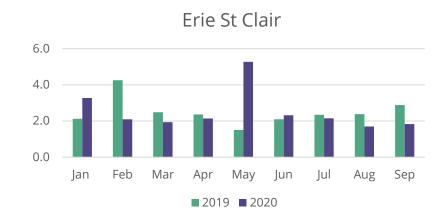
Fewer records than usual submitted for the following LHINs and Fiscal quarters (Interpret with caution): ESC LHIN MHLHIN, SW LHIN, TC LHIN (FY2021Q2) Champlain LHIN (No data submission)

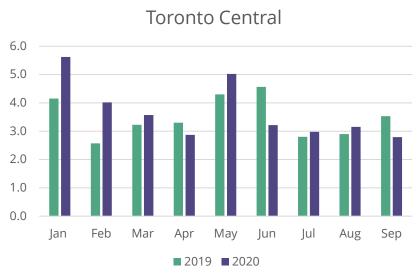
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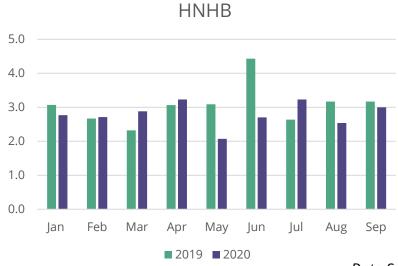
Data Source: DAD

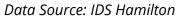
Median Time from Stroke Onset to ED Registration





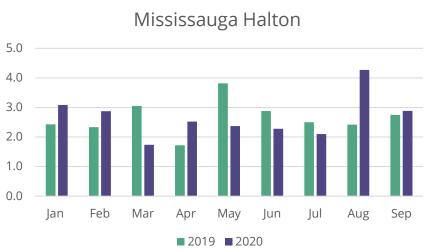


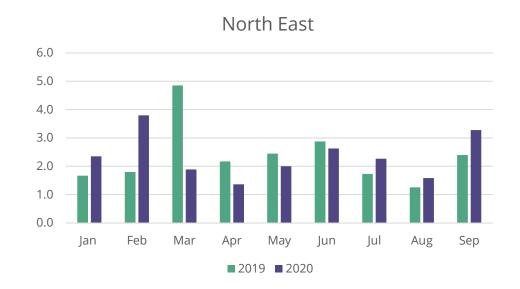




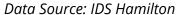
Median Time from Stroke Onset to ED Registration















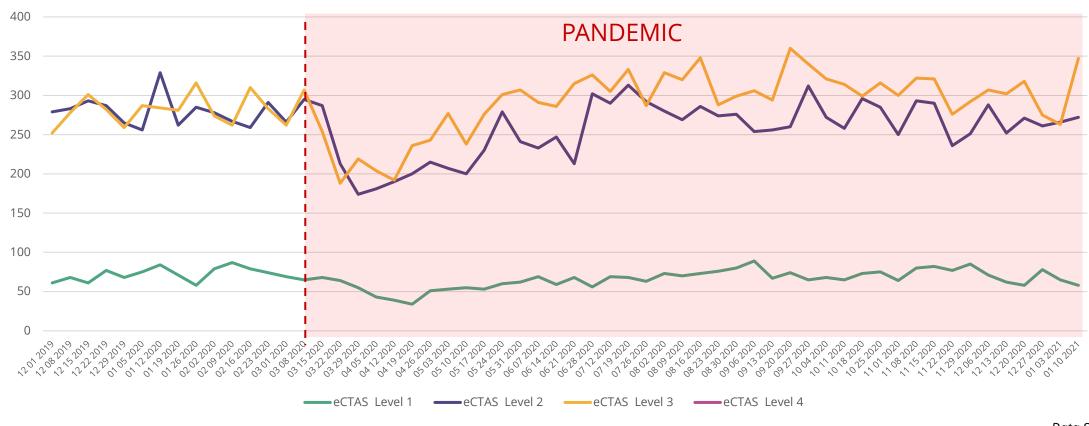


Appendix B. Stroke Activity eCTAS Data

A GLIMPSE INTO THE EMERGENCY DEPARTMENTS FOR STROKE PRESENTATIONS

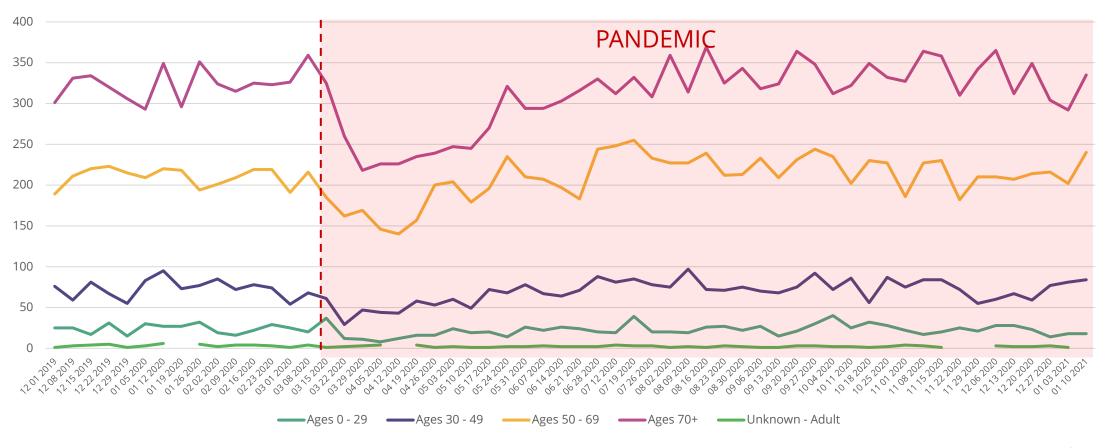
DEC 1ST 2019 – JANUARY 10TH 2020

Stroke Related Presentations - By CTAS Level



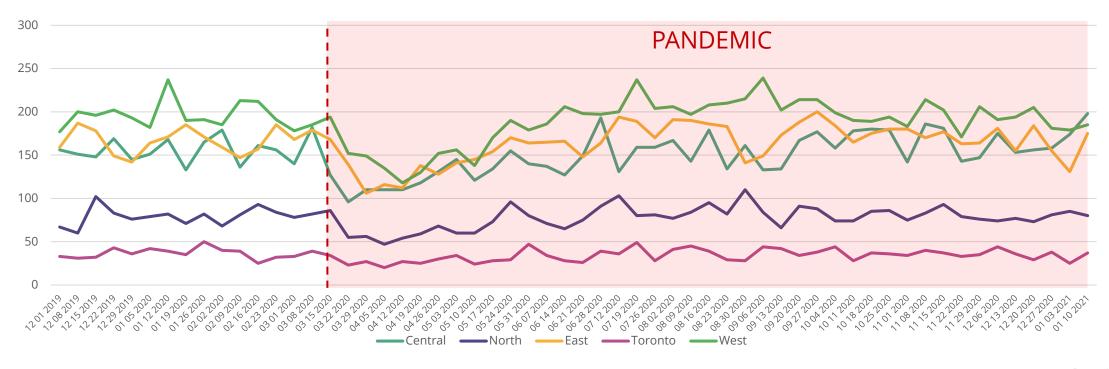


Stroke Related Presentations – By Age Group



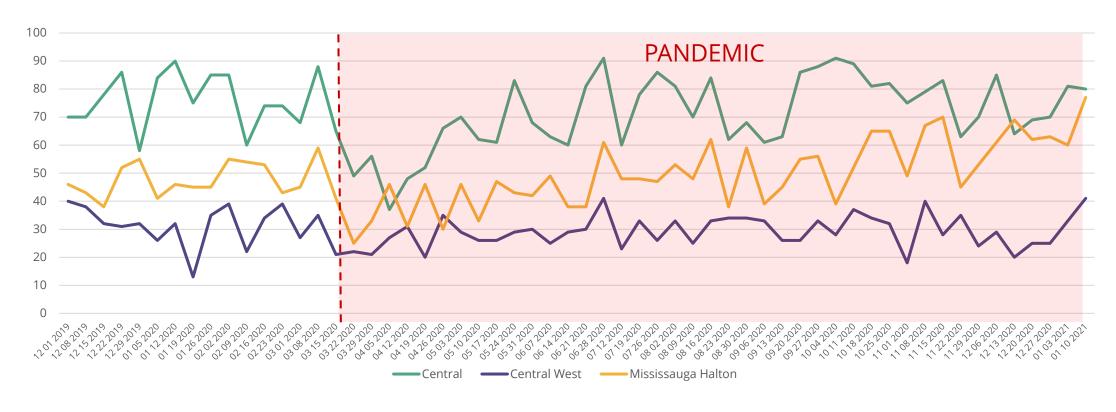


Stroke Related Presentations - By Stroke Region





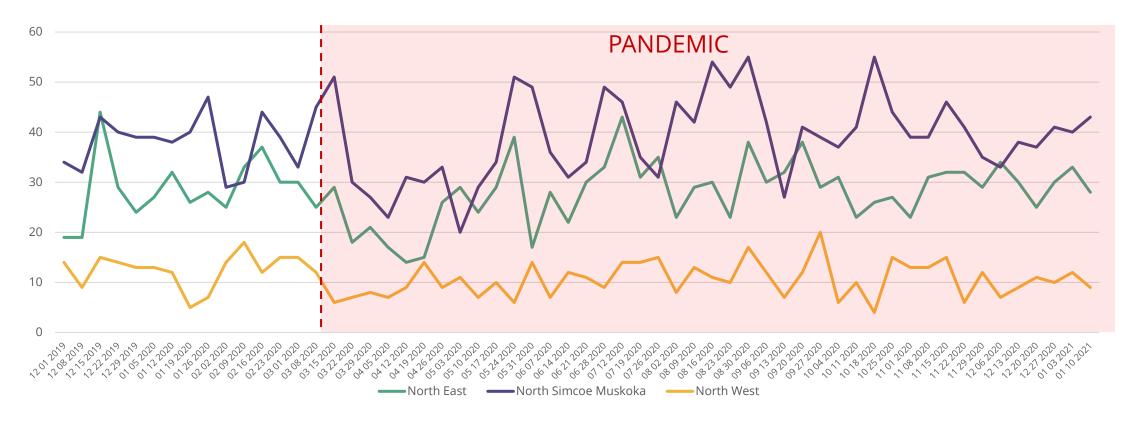
Central Region





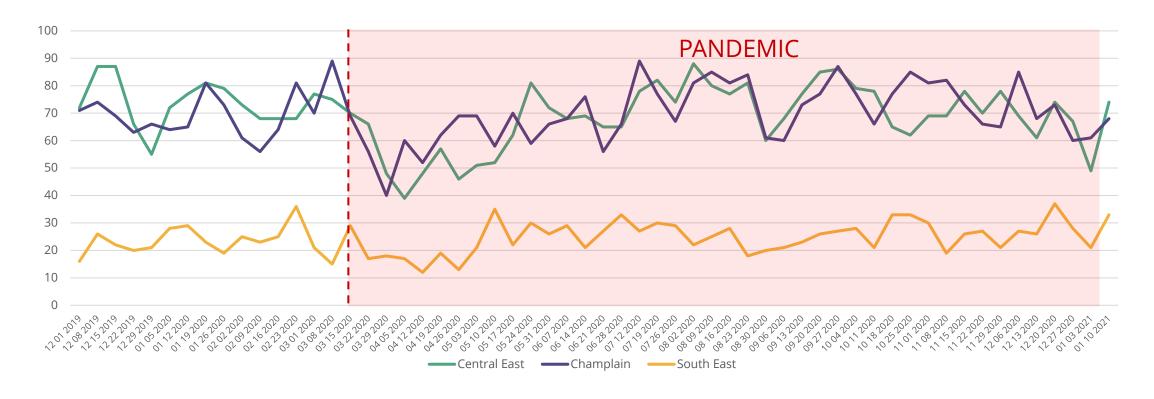


North Region



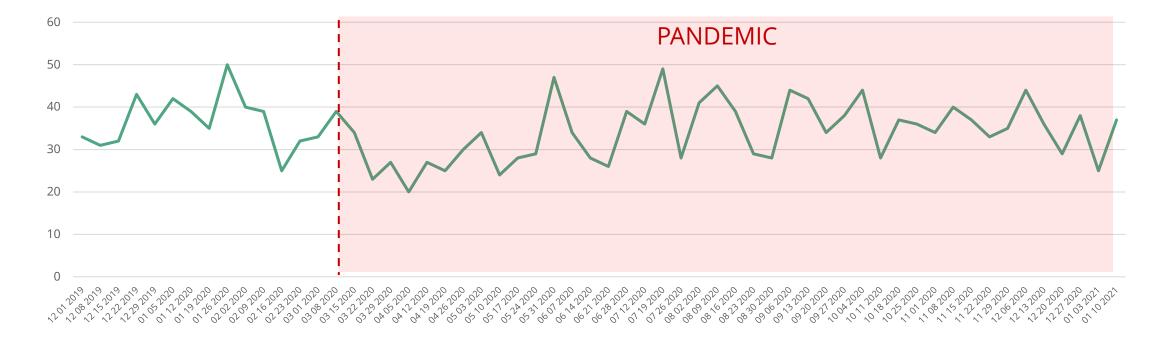


East Region



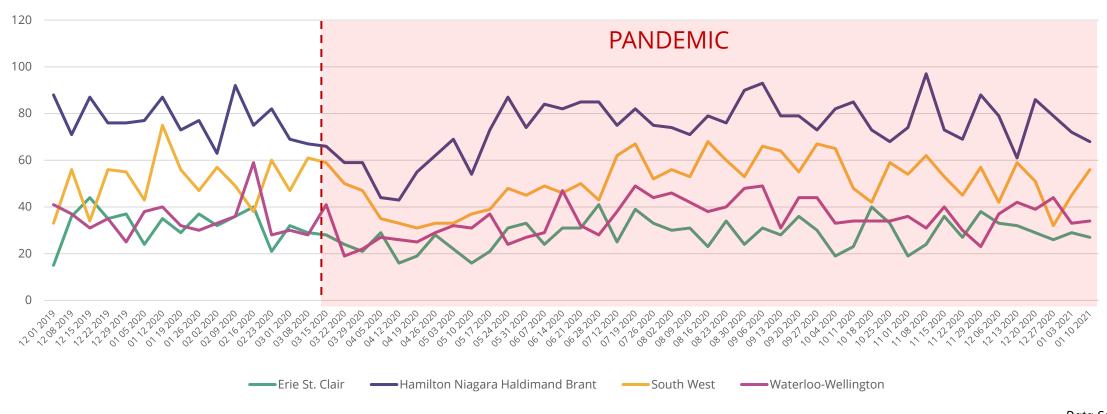


Toronto Region





West Region





Technical Notes

Data Source: IDS, National Ambulatory Care Reporting System

Methodology Notes:

- Stroke ED visits are defined as those with a NACRS Main Diagnosis of stroke/TIA = I60 (excl. I608), I61, I63 (excl. I636), I64, H341, H340, G45 (excl. G454).
- ED visits (ED Visit indicator=1) and hospital admissions through ED are reported by the month and year of ED registration.
- ED visits resulting in admission are defined as ED visits with a discharge disposition of:

06 - Admit to reporting facility as inpatient to special care unit or OR from ambulatory care, 07 - Admit to reporting facility as inpatient to another unit of reporting facility from ambulatory care, or 08 - Transfer to another acute care facility directly from ambulatory care.

Data Source: IDS, Discharge Abstract Database (DAD)

The patient was admitted via the ED (Entry Code = E – Emergency)

Stroke symptom onset date and time is coded in the project 340 data on the DAD record

For cases from FY 2015 onward, this is coded as: Project 340, Fields 13-24: Fields 13-16 Year (YYYY), Fields 17-18 Month (MM), Fields 19-20 Day (DD), Fields 21-24 Hour (HH) and Minutes (MM) o Exclude cases where the onset date and time is unknown or invalid (i.e. exclude cases where each field is equal to 9, or 0, or the fields do not form a valid date) o

Exclude cases with an unknown stroke onset time (time recorded as 00:00) o Exclude cases where the stroke onset date/time is after the ED registration date/time o Exclude cases where the stroke onset date/time is more than 7 days prior from the ED registration date.

The inpatient acute discharge has a valid link to the prior unscheduled ED visit (NACRS): There is a prior NACRS record via the "Admitted from NACRS Visit to DAD" link in IDS, where the prior NACRS record is an: 1) Unscheduled Emergency Department (ED) visit (ED Visit Indicator = 1) 2) Valid Registration Date and Time 3) Exclude patients who were present in an acute care or ambulatory care facility prior to the ED visit: 4) If the Institution Type Description From = "Acute Care Treatment Hospital" or "Ambulatory Care" on the prior NACRS record, the case should be excluded.

