



Region of Waterloo * Paramedic Services
PERFORMANCE MEASUREMENT

Performance Measurement Report
For the Period of January – June 2019
Produced on July 19th, 2019



Region of Waterloo * Paramedic Services PERFORMANCE MEASUREMENT

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Summary

A. Volume and Service Level Indicators

Indicator	Jan to Jun 2018	Jan to Jun 2019	Per cent change
Total Number of Vehicle Responses	27,470	28,942	+5.4%
Rate of vehicle responses per 1,000 population*	92.1	96.1	+4.2%
Unit Utilization	41.7%	41.9%	+0.3%

B. Compliance and Quality Assurance Indicators

Indicator	Jan to Jun 2018	Jan to Jun 2019	Per cent change
Paramedic Services Response Time to Emergency Calls	9min 31sec	9min 17sec	-2.5%
Response Time Performance Plan Compliance Resuscitation calls (CTAS1)	73.4%	76.8%	+4.5%
Response Time Performance Plan Compliance Emergent calls (CTAS2)	81.2%	80.3%	-1.1%

C. Efficiency Indicators

Indicator	Year-to-date 2018	Year-to-date 2019	Per cent change
Offload Delay (monthly average)*	20.4 days (Jan to Jun)	25.5 days (Jan to Jun)	+25.0%
Code Yellow Time	10.5% (Jan to May)	6.8% (Jan to May)	-35.5%
Code Red Time	1.0% (Jan to May)	0.8% (Jan to May)	-16.6%

D. Service and Quality Impact Indicators

Indicator	Jan to Jun 2018	Jan to Jun 2019	Per cent change
Stroke Patient to Stroke Facility*	99.3%	100.0%	+0.7%
Return of Spontaneous Circulation*	15.6%	17.6%	+13.2%
Heart attack (STEMI) protocol*	63.6%	62.2%	-2.2%

*A similar indicator is captured, with some variation in measurement units, within a portion of the MBN Canada (formerly OMBI) reporting process.



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A. Volume and Service Level Indicators

Definition of Indicator Group

Quantity type indicators that show values related to work intake and work breakdown (how much did we do?).

Summary of Results

Between January and June 2019 there were 28,942 vehicle responses by Paramedic Services; an increase of 1,472 calls, or 5.4 per cent, from same time period in 2018. The 4.2 per cent increase in the rate of vehicle responses per 1,000 people, so far in 2019, was more than three times faster than the five-year average regional population growth rate of 1.3 per cent. The increasing vehicle response rate can largely be attributed to an aging population and changes to caller behaviour. Ambulances were in use 41.9 per cent of the time so far in 2019, essentially unchanged from the 41.7 per cent ambulance observed January to June 2018; but well above the master plan established a benchmark of target of 35 per cent. Above this threshold it becomes difficult to ensure an ambulance will be available for the next call in a reasonable time. Monitoring unit utilization allows for proactive planning to ensure community needs are met in a reasonable time while using a sustainable level of deployed staff. Ambulance use so far in 2019 has ranged from an hourly low of 23.4 per cent at 5AM to an hourly high of 51.8 per cent at 9PM. For unit utilization, a decreasing trend is considered positive, while an increasing trend is seen as a negative.

Indicator Name	Indicator Definition	Jan to Jun 2018	Jan to Jun 2019	Per cent change
Number of Vehicle Responses	A measure of service demand. The total number of ambulances or emergency response units (vehicles) that responded to calls dispatched to Region of Waterloo Paramedic Services inside or outside of Waterloo Region. More than one vehicle may respond to a single call; for example, multiple casualty incidents.	27,470	28,942	+5.4%
Rate of Vehicle Responses per 1,000 population	A measure of service demand. The rate of vehicle responses per 1,000 population to calls dispatched to Region of Waterloo Paramedic Services inside or outside of Waterloo Region. More than one vehicle may respond to a single call; for example, multiple casualty incidents.	92.1	96.1	+4.2%
Unit Utilization (ambulance use)	Unit utilization is the per cent of time ambulances and emergency response units are actively engaged in responding to calls (codes 1-4) as opposed to being deployed waiting for calls.	41.7%	41.9%	+0.3%



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Number and rate of vehicle responses per 1,000 population, by dispatch priority code and year

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st to June 30th, 2014-2019

Overall priority code	Number of vehicle responses						2014→2019
	2014	2015	2016	2017	2018	2019	
1 – Deferrable	289	81	65	49	44	30	
2 – Scheduled	79	57	66	39	44	35	
3 – Prompt	5,398	6,585	6,319	6,670	7,276	7,880	
4 – Urgent	14,606	15,748	17,464	18,923	20,106	20,997	
Rate per 1,000 (YTD)	72.2	78.8	82.4	87.2	92.1	96.1	
Annual change (%)	1.6%	9.2%	4.5%	5.8%	5.7%	4.2%	
Total vehicle responses (YTD)	20,372	22,471	23,914	25,681	27,470	28,942	
Annual change (%)	2.7%	10.3%	6.4%	7.4%	7.0%	5.4%	
Total vehicle responses (annual)	42,096	45,344	48,577	52,982	55,696	*58,364	
Annual change (%)	4.6%	7.7%	7.1%	9.1%	5.1%	*4.8%	

Source: ADRS (July 19th, 2019)

■ Lowest value
 ■ Middle value(s)
 ■ Highest value



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Rate of vehicle responses per 1,000 population, by municipality and year

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st to June 30th, 2014-2019

Rate of vehicle responses per 1,000, by year, within Waterloo Region		Year-to-date		2019
		2014 → 2019	Min. - Max.	
Cities	Cambridge		71.1 - 103.2	101.4
	Kitchener		79.6 - 106.6	106.6
	Waterloo		52.1 - 74.3	74.0
	Cities total		70.9 - 96.7	96.7
Townships	North Dumfries		61.5 - 98.2	98.2
	Wellesley		32.4 - 49.8	49.8
	Wilmot		54.5 - 79.4	74.7
	Woolwich		63.9 - 85.5	85.5
Townships total			57.5 - 78.2	78.2
Waterloo Region total			69.4 - 94.6	94.6
Number and proportion of total vehicle Responses outside Waterloo Region*		2014 → 2019	Min. - Max.	2019
Number of vehicle responses			399 - 491	448 vehicle responses
Proportion of total vehicle responses			1.5 - 2.4	1.5 per cent

* A population based rate of vehicle responses cannot be accurately calculated for calls outside of Waterloo Region because it is not possible to determine an accurate service population (denominator).

Source: ADRS (July 19th, 2019)

Lowest value Middle value(s) Highest value



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Number and rate of vehicle responses per 1,000 population, by municipality and month

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st to June 30th, 2019

Rate of vehicle responses per 1,000, by month, within Waterloo Region		Jan → Dec	Year-to-date (YTD)	
			Rate per 1,000	Total calls
Cities	Cambridge		101.4	6,951
	Kitchener		106.6	13,629
	Waterloo		74.0	5,176
	Cities total		96.7	25,756
Townships	North Dumfries		98.2	522
	Wellesley		49.8	288
	Wilmot		74.7	808
	Woolwich		85.5	1,120
	Townships total		78.2	2,738
Waterloo Region total			94.6	28,494
Outside Waterloo Region total*				448
Waterloo Region Paramedic Services total*				28,942

* A population based rate of vehicle responses cannot be accurately calculated for calls outside of Waterloo Region because it is not possible to determine an accurate service population (denominator).

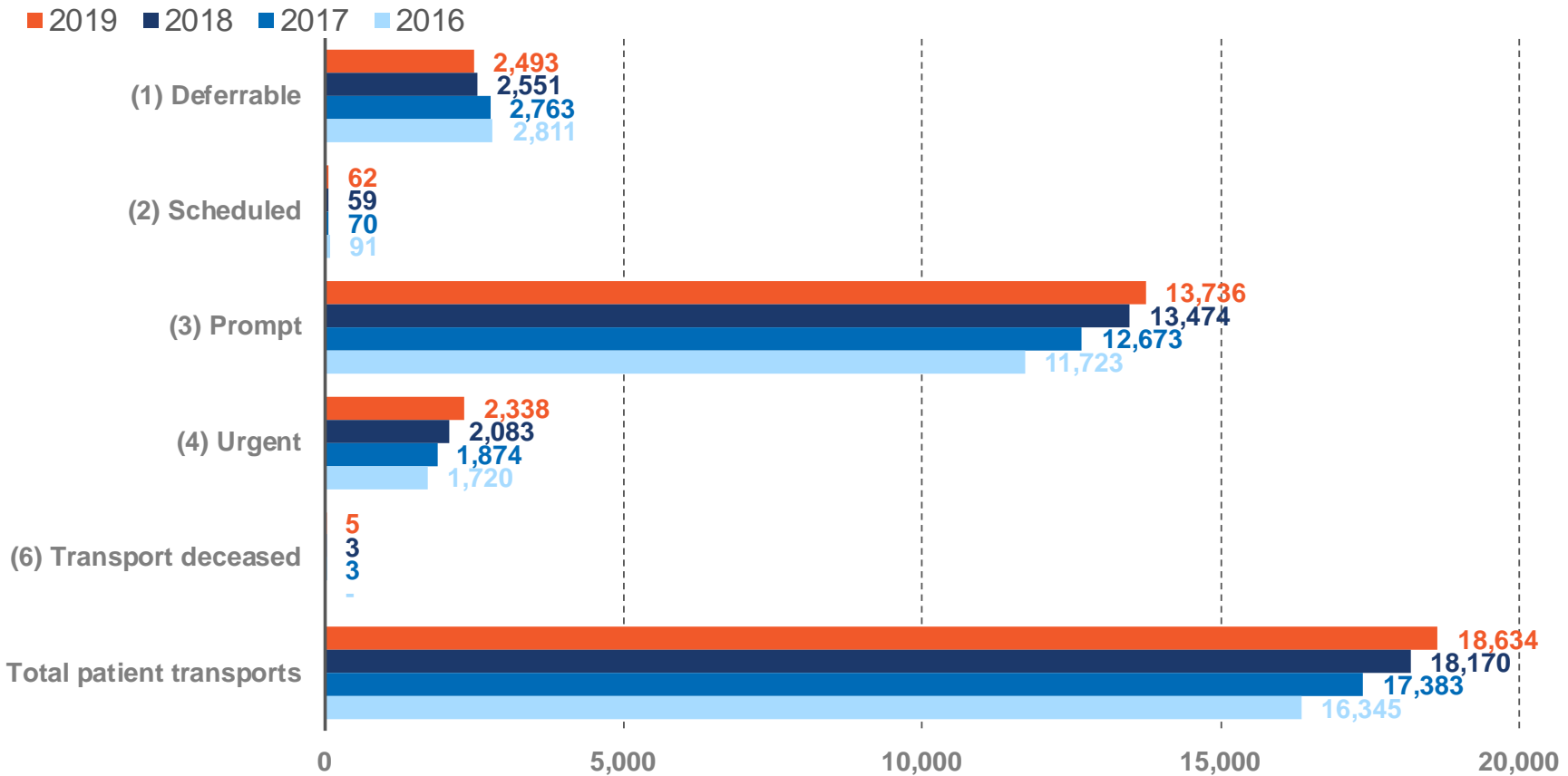
Source: ADRS (July 19th, 2019)



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Number of patient transports, by return priority code

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st to June 30th, 2014-2019



Source: TabletPCR (July 19th, 2019)



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Various measures of service provided by Region of Waterloo Paramedic Services, by year

Inside and outside of Waterloo Region, January 1st to June 30th, 2014-2019

Measure	2014	2015	2016	2017	2018	2019	2014 → 2019	Per cent change (2014-2019)
Number of unique calls (T1, code 1-4)	18,145	19,456	20,676	22,250	23,701	24,608		35.6
Number of vehicles dispatched (T2, code 1-4)	20,372	22,472	23,914	25,681	27,470	28,942		42.1
Number of vehicles arriving on scene (T4, code 1-4)	18,392	19,953	21,279	22,774	24,148	25,240		37.2
Number of vehicles transporting patients (T6, code 1-4)	14,265	15,189	16,089	17,138	17,883	18,226		27.8
Number of patients transported (T6, code 1-4)	14,392	15,350	16,257	17,200	17,959	18,299		27.1
Per cent of vehicles dispatched arriving on scene	90.3	88.8	89.0	88.7	87.9	87.2		-3.4
Per cent of vehicles arriving on scene transporting patients	77.6	76.1	75.6	75.3	74.1	72.2		-6.9

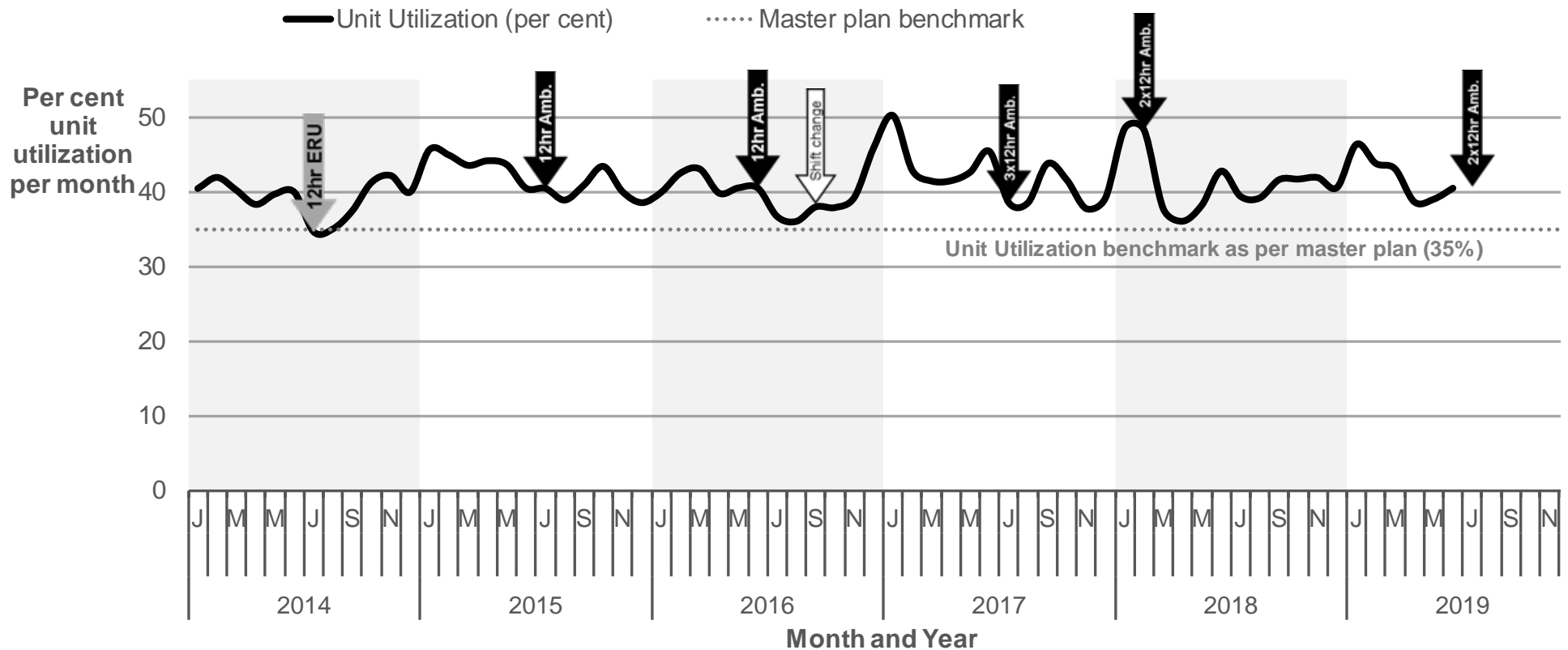
Note that due to differences between the ADRS and TabletPCR data sources, there may be variance between similar indicators.

Source: ADRS (July 19th, 2019)

Lowest value
 Middle value(s)
 Highest value

Unit Utilization (ambulance use), by month

Region of Waterloo Paramedic Services, January 1st, 2014 to June 30th, 2019



Note: For unit utilization, a decreasing trend is considered positive, while an increasing trend is seen as a negative.

Source: ADRS (July 19th, 2019)



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B. Compliance and Quality Assurance Indicators

Definition of Indicator Group

Indicators that monitor Paramedic Services' adherence to internal process, procedure, legislated mandates etc. (how well did we do it?).

Summary of Results

For January to June 2019 the 80th percentile response time to emergency calls (code 4) within Waterloo Region was 9 minutes and 17 seconds; 14 seconds faster than the same time period in 2018. Paramedic Services also continues to monitor response times observed from urban, suburban, and rural perspectives, as defined by call density, against informal benchmarks. Response times vary according to population and road density. Drive times are longer in rural areas. Paramedic Services is currently in compliance to all 2019 response time performance plan targets. The results indicate urgent calls are being given a more appropriate priority and attended to faster. Setting faster times for more urgent calls and progressively slower times for less urgent calls is a standard approach. Compliance to the Sudden Cardiac Arrest (SCA) call target is currently underestimated due to the temporary loss of fire department data resulting from changes to the computer system and data exchange process. Resuming the inclusion of fire department data, expected by year-end, should improve SCA compliance another 10 per cent. Work is on-going to re-incorporate fire department data into the measure following this temporary loss.

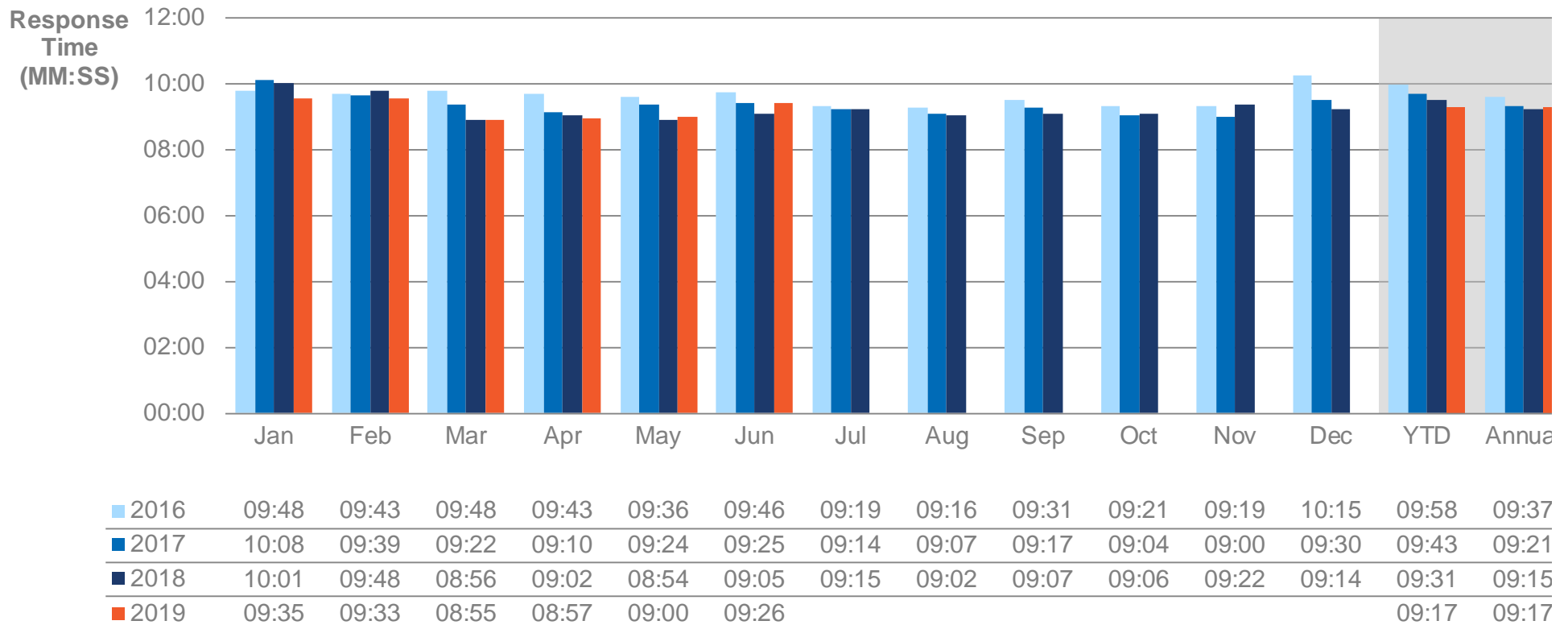
Indicator Name	Indicator Definition	Jan to Jun 2018	Jan to Jun 2019	Per cent change
Paramedic Services Response Time to Emergency Calls	A measurement of the Paramedic Services' ability to meet performance a summary performance indicator, response time to code 4 calls, 80 th percentile.	9min 31sec	9min 17sec	-2.5%
Response Time Performance Plan Compliance Resuscitation calls (CTAS1)	Resuscitation calls involve conditions that are, or may pose, an imminent threat to life or limb or risk of deterioration requiring immediate aggressive interventions; ideal physician assessment is immediate. The current target for resuscitation calls is a response time of 8 minutes or less 70 per cent of the time or better.	73.4%	76.8%	+4.5%
Response Time Performance Plan Compliance Emergent calls (CTAS2)	Emergent calls involve conditions that potentially threaten to life, limb or function, requiring rapid medical interventions or delegated acts; ideal physician assessment is within 15 minutes. The current target for emergent calls is a response time of 10 minutes or less 80 per cent of the time or better.	81.2%	80.3%	-1.1%



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Response time to emergency calls (code 4), 80th percentile, by month

Any paramedic service, inside Waterloo Region, January 1st, 2016 to June 30th, 2019

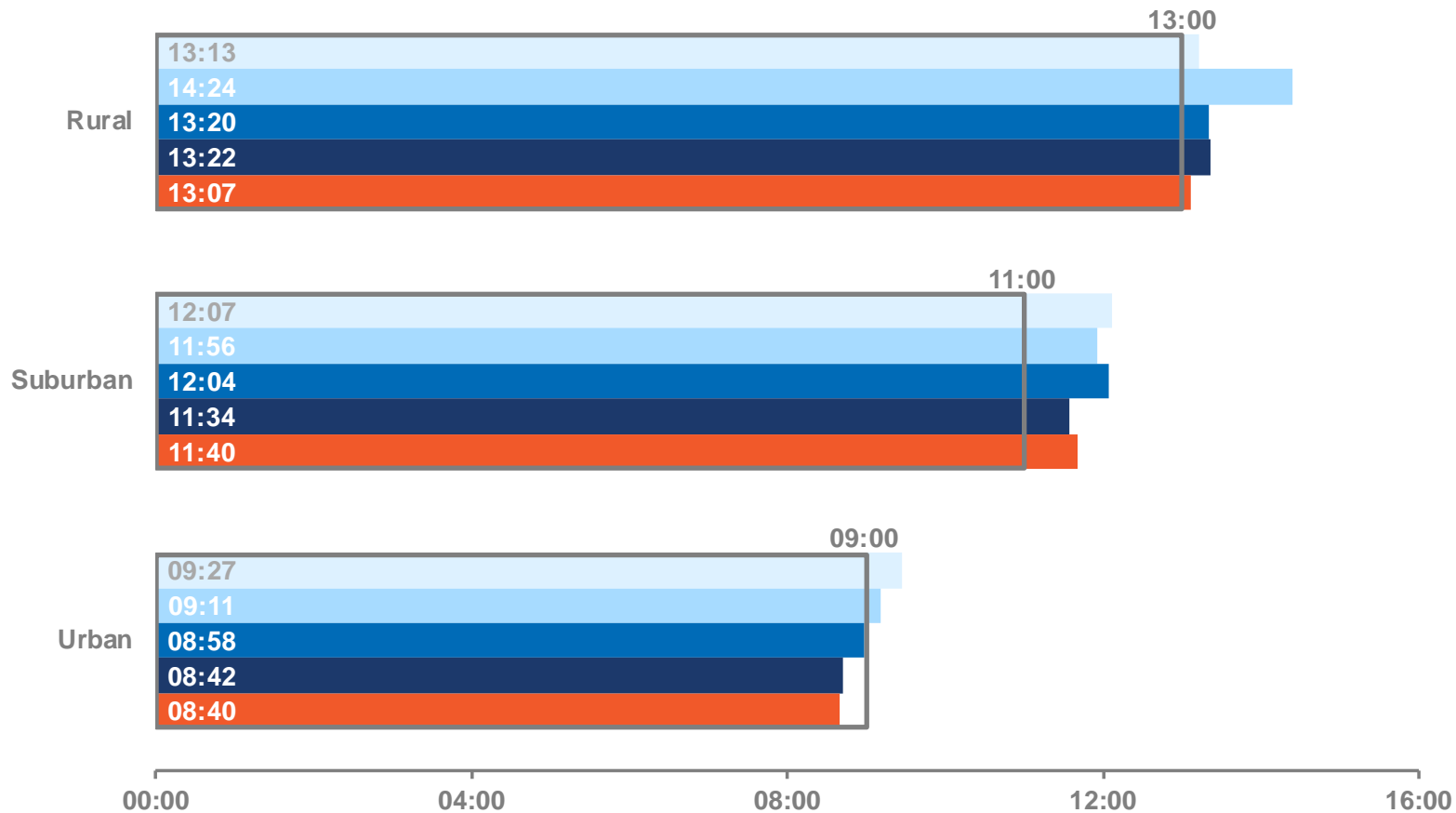


Sources: ADRS (July 19th, 2019)

Response time to emergency calls (code 4), 80th percentile, by vehicle response density

Any paramedic service, inside Waterloo Region, January 1st to June 30th, 2015-2019

2015 2016 2017 2018 2019 Informal monitoring benchmark



Source: ADRS (July 19th, 2019)



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Compliance to 2019 response time performance plan, by Canadian Triage Acuity Score (CTAS)

Region of Waterloo Paramedic Services, inside or outside of Waterloo Region, January 1st to June 30th, 2018 and 2019

Type of call	Response Time Target Paramedic Services notified (T2) to arrive scene (T4)	Approved 2019 Region of Waterloo target	2018		2019	
			Per cent compliance	Percentile time (mm:ss)	Per cent compliance	Percentile time (mm:ss)
Sudden Cardiac Arrest	Defibrillator response in 6 minutes or less (set by MOHLTC)	50% or better (Paramedic and Fire)	61.0%	05:14	52.6%*	05:53*
CTAS 1 (resuscitation)	Paramedic Services response in 8 minutes or less (set by MOHLTC)	70% or better (Paramedic Services only)	73.4%	07:44	76.8%	07:31
CTAS 2 (emergency)	Paramedic Services response in 10 minutes or less	80% or better (Paramedic Services only)	81.2%	09:46	80.3%	09:56
CTAS 3 (urgent)	Paramedic Services response in 11 minutes or less	80% or better (Paramedic Services only)	81.9%	10:42	81.8%	10:38
CTAS 4 (less urgent)	Paramedic Services response in 12 minutes or less	80% or better (Paramedic Services only)	83.1%	11:24	83.7%	11:08
CTAS 5 (non-urgent)	Paramedic Services response in 12 minutes or less	80% or better (Paramedic Services only)	80.0%	12:00	80.8%	11:54

*Due to changes in the fire departments' computer systems Waterloo Fire Rescue and Cambridge Fire Department data are temporarily only included in the SCA compliance results for 2018. Year-end 2019 results are expected to resume with all fire department data included. Work continues to re-incorporate fire department data in the measure following this change in process.

Source: ADRS, TabletPCR, Waterloo Fire Rescue, and Cambridge Fire Department (July 19th, 2019)



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C. Efficiency Indicators

Definition of Indicator Group

Indicators that outline how timely Paramedic Services is being performed by staff and offered to the Region (how well did we do it?).

Summary of Results

Currently, an average of 25.5 ambulance days per month is lost to offload delay. A total of 146.9 ambulance days were lost to offload delay between January and June 2019. Offload delay has increased of 25.0 per cent compared the same time period in 2018 resulting in the loss of 11 additional ambulance days relative to the same time period in 2018. Paramedic Services continues to work with area Emergency Departments to minimize losses due to offload delay. Compared to January to May 2018, there were 121 fewer code yellow events and the equivalent of 5.6 fewer days spent in code yellow in 2019 while there were 33 fewer code red events and the equivalent of 0.3 fewer days spent in code red in 2019 compared to the same time period in 2018.

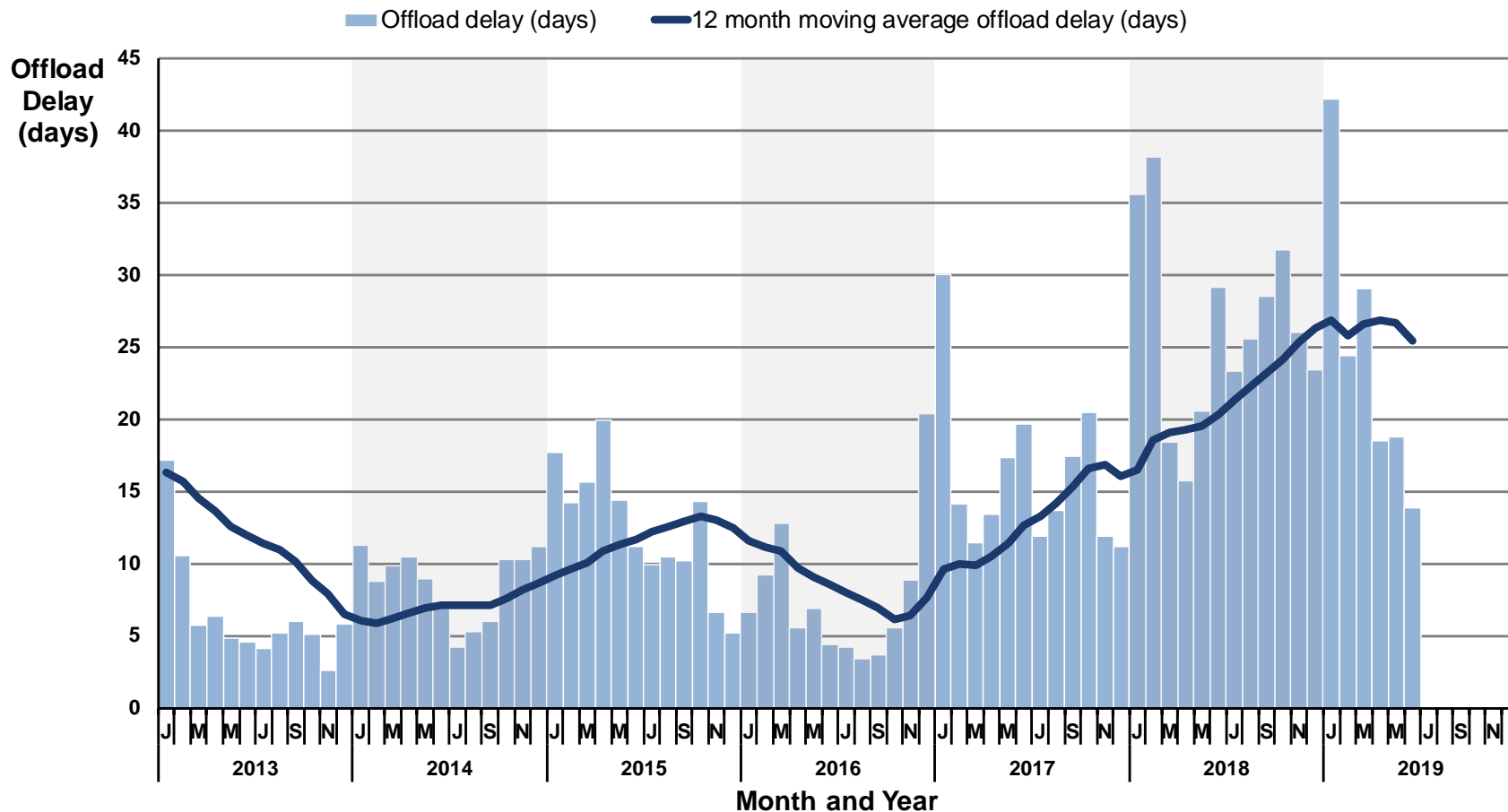
Indicator Name	Indicator Definition	Year-to-date 2018	Year-to-date 2019	Per cent change
Offload Delay (monthly average)	The 12 month moving average number of 24 hour ambulance days lost to offload delay over the course of a month.	20.4 days (Jan to Jun)	25.5 days (Jan to Jun)	+25.0%
Code Yellow Status	The percentage of time where Paramedic Services is in a Code Yellow Status for the month (\leq three vehicles available).	10.5% (Jan to May)	6.8% (Jan to May)	-35.5%
Code Red Status	The percentage of time where Paramedic Services is in a Code Red Status for the month (zero vehicles available).	1.0% (Jan to May)	0.8% (Jan to May)	-16.6%



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Ambulance days and moving average of ambulance days lost to offload delay, by month

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st, 2013 to June 30th, 2019



For offload delay, a decreasing trend is considered positive, while an increasing trend is seen as negative.

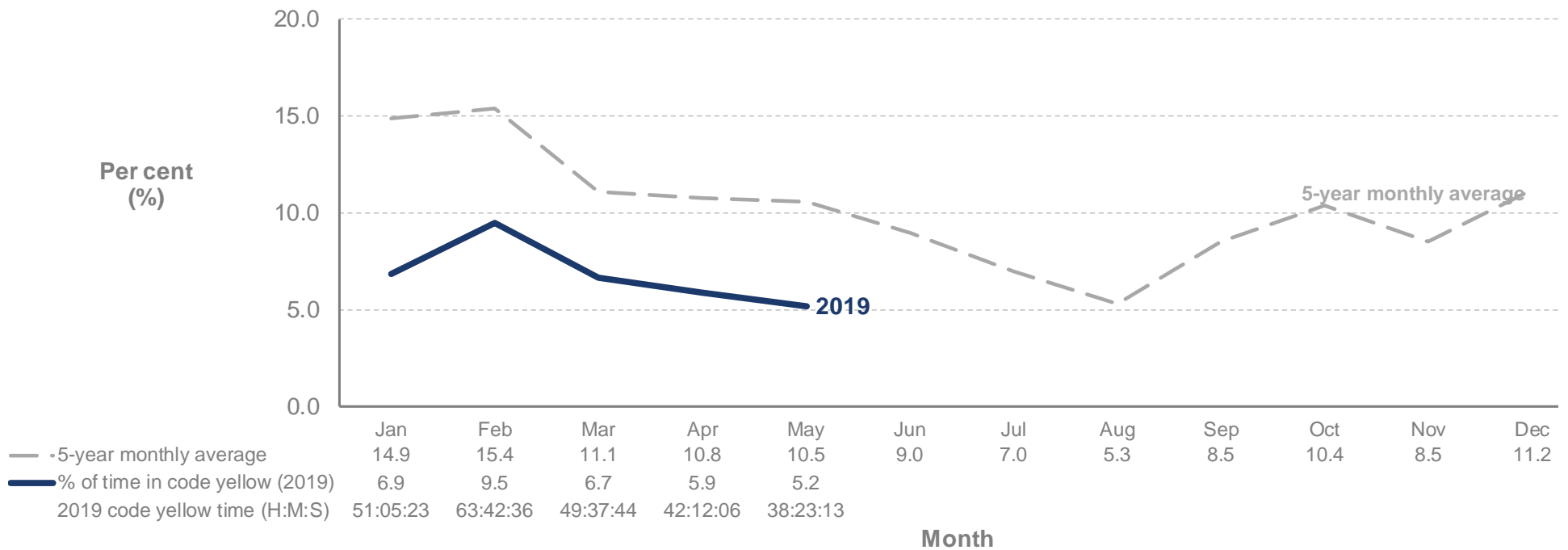
Source: TabletPCR (July 19th, 2019)



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Percentage of time in code yellow status, by month

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st to December 31st, 2014-2018, and January 1st to May 31st 2019



	Jan	Feb	Mar	Apr	May
2019 code yellow time (H:M:S)	51:05:23	63:42:36	49:37:44	42:12:06	38:23:13

Note: June 2019 data currently not available.

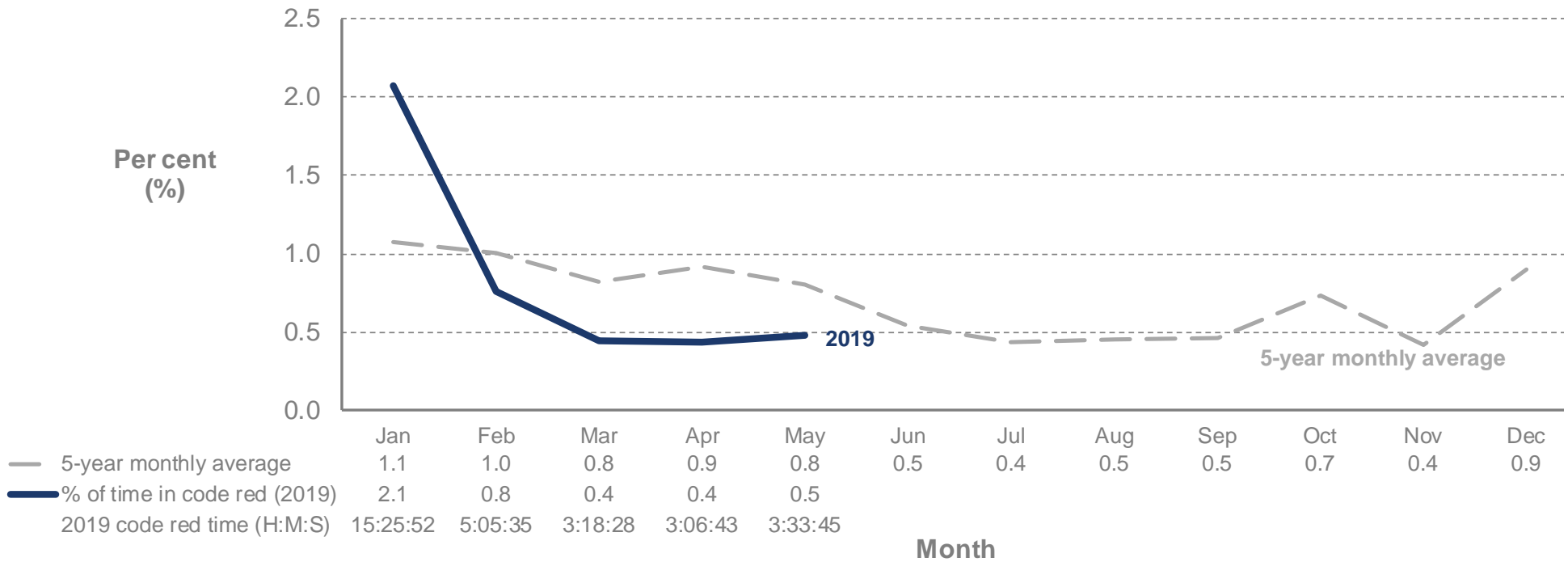
Source: CACC (July 19th, 2019)



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Percentage of time in code red status, by month

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st to December 31st, 2014-2018, and January 1st to June 30th 2019



Source: CACC (July 19th, 2019)



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D. Service and Quality Impact Indicators

Definition of Indicator Group

Indicators that measure not only the timely provision of service, but how well that service is being provided by Paramedic Services' staff (How well is the service being performed?).

Summary of Results

For January to June 2019, 90.5 per cent of all stroke patients, and 100.0 per cent of all stroke protocol eligible patients, were transported to a stroke facility; consistent with the historical trend. The percentage of cardiac arrest patients with the return of pulse improved 13.2 per cent between January and June 2018 and 2019. As any return of spontaneous circulation is deemed to be positive, results are in an acceptable range. Heart attack STEMI (ST-segment elevation myocardial infarction) protocol compliance (providing care in less than 90 minutes) was 2.2 per cent lower from the previous year. Note that service type indicators tend to fluctuate around the average over time, due to the small number of cases and the large number of complex variables involved in these cases.

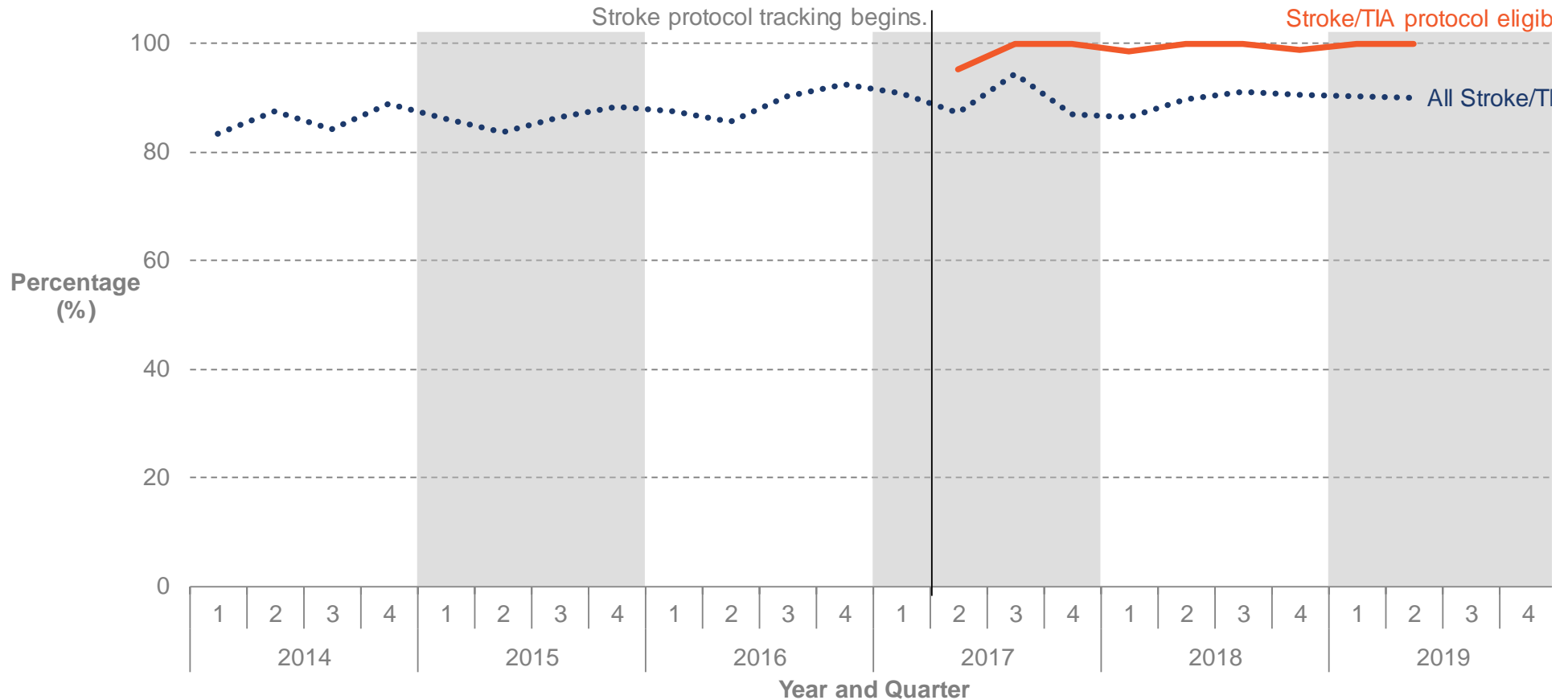
Indicator Name	Indicator Definition	Jan to Jun 2018	Jan to Jun 2019	Per cent change
Stroke Patient to Stroke Facilities	The percentage of all stroke patients, not stroke protocol eligible patients, taken to stroke facilities. The stroke protocol outlines that only patients with certain symptoms within certain timelines require transport to a stroke facility. Due to this, a value less than 100% may not represent a missed target.	99.3%	100.0%	+0.7%
Return of Spontaneous Circulation (ROSC)	The percentage of cardiac arrest patients with the return of pulse.	15.6%	17.6%	+13.2%
Heart attack (STEMI) Protocol ST-Segment Elevation Myocardial Infarction	Percentage of STEMI patients where care was provided in less than 90 minutes ('STEMI' represents a type of heart attack). *Note: indicator results are shared among Paramedic Services and St. Mary's Hospital. Paramedic Services can only control time from patient contact to arrival at St. Mary's Hospital; the remaining time to the 90 minute target is hospital dependent.	63.6%	62.2%	-2.2%



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Percentage of stroke patients transported to a stroke facility†, by quarter

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st, 2014 to June 30th, 2019



†Stroke facilities include: Grand River, Brantford General, Hamilton General, Stratford General, and Guelph General.

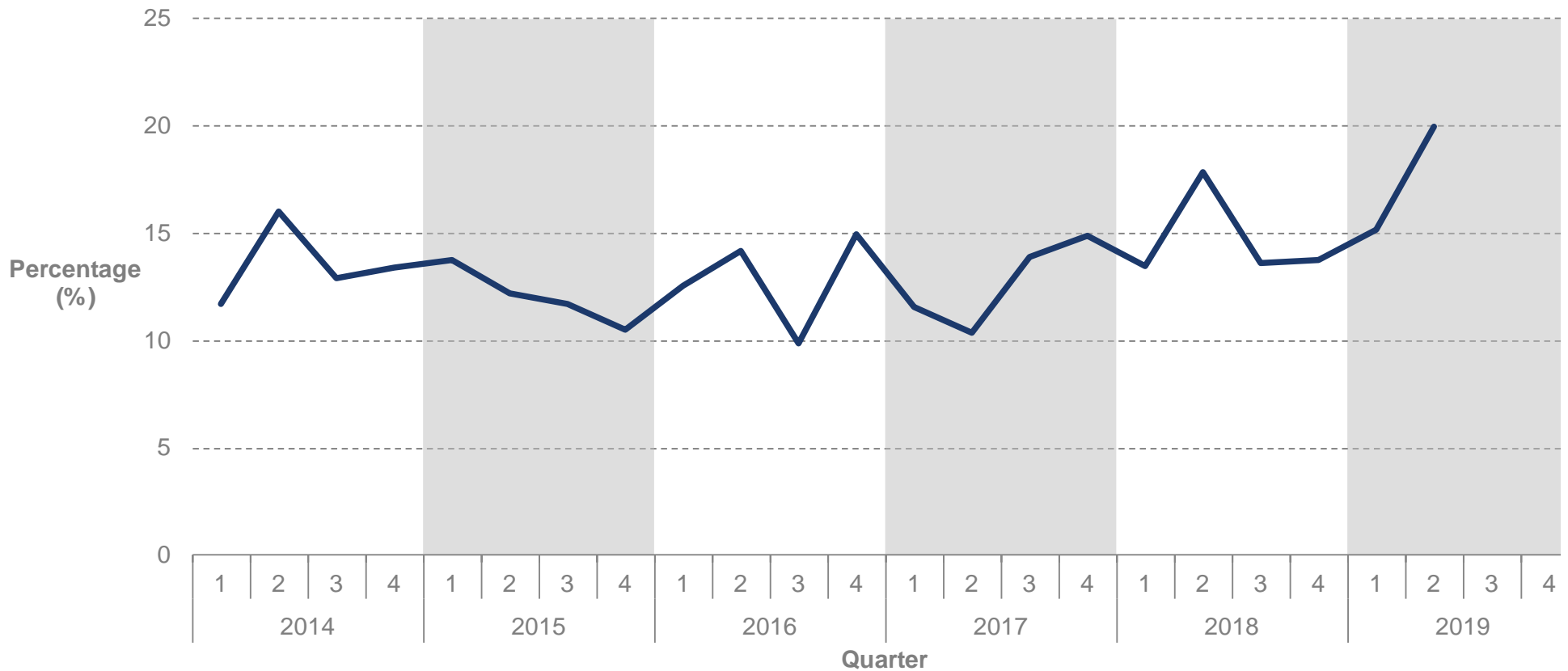
Source: TabletPCR (July 19th, 2019)



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Percentage of cardiac arrest patients with return of spontaneous circulation (ROSC), by quarter

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st, 2014 to June 30th, 2019



Source: TabletPCR (July 19th, 2019)

Percentage of heart attack patients where care was provided in less than 90 minutes (STEMI protocol), by quarter

Region of Waterloo Paramedic Services, inside and outside of Waterloo Region, January 1st, 2014 to June 30th, 2019



Source: St. Mary's Hospital (July 19th, 2019)

E. GLOSSARY

ADRS: Ambulance Dispatch Reporting System

CACC: Central Ambulance Communications Centre

Call density: A 1km x 1km grid was overlaid across Waterloo Region so each call could be assigned a grid square based on its location. The total number of calls and an average per month calculated for each grid square. Grid squares were then assigned one of three classes:

Urban - A grid square was classed as urban if there were more than two calls per month per square kilometer and at least half of its neighbouring grid squares were of the same density or higher.

Suburban - A grid square was classed as suburban if there were less than or equal to two calls and more than 0.5 calls per month per square kilometer and at least half of its neighbouring grid squares were of the same density or higher.

Rural - A grid square was classed as suburban if there were less than or equal to 0.5 calls and more than 0.08 calls per month per square kilometer and at least half of its neighbouring grid squares were of the same density or higher.

Cardiac Arrest: A sudden, sometimes temporary, cessation of the heart's functioning.ⁱ

Code 1 (Deferrable): A routine call that may be delayed without detriment to the patient (e.g. a non-scheduled transfer; a minor injury).ⁱⁱ

Code 2 (Scheduled): A call which must be done at a specific time, for example because of special treatment or diagnostic facility requirement (e.g. inter-hospital transfers or a scheduled meet with an air ambulance).ⁱⁱⁱ

Code 3 (Prompt): A call that should be performed without delay (e.g. serious injury or illness).^{iv}

Code 4 (Urgent): A call that must be performed immediately where the patients 'life or limb' may be at risk (e.g. Vital Signs Absent patient or unconscious head injury).^v

Code Red: When the Region of Waterloo Paramedic Services is at a level where no ambulances are available to respond to the next emergency call and no out of town services are immediately available to assist.^{vi}

Code Yellow: When the Region of Waterloo Paramedic Services is at minimum coverage of three vehicles or less.^{vii}



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CTAS Level: The 'Canadian Triage & Acuity Scale' is used to assign a level of acuity to a patient. Acuity refers to the gravity of the situation – the potential for death and/or irreversible illness. CTAS is a tool that more accurately defines the patient's need for care. Assignment of the CTAS level is to be based upon not only the presenting complaint identified on the initial assessment made by the paramedic, but also on their examination findings, and response to treatment.^{viii}

Defibrillator: An electronic device that applies an electric shock to restore the rhythm of a fibrillating heart.^{ix}

Dispatch Priority Code: The priority code number that is assigned to the call by the dispatcher. It identifies the priority under which the ambulance responds to the call location (e.g. an urgent response would be entered as Code 4).^x

Emergency Calls: Based on dispatch priority only. Emergency calls are categorized as Code 4 (Urgent).

Indicator: A defined part of a program/team/system that is deemed important to measure and provide "specific information on the state or condition of", as it contributes to the efficient and effective achievement of an outcome.^{xi}

MBNCanada: Municipal Benchmarking Network Canada, formerly the Ontario Municipal Benchmarking Initiative (OMBI), is a partnership between Canadian municipalities for the purpose of fostering and supporting a culture of service excellence through the identification, creation, and collection of consistent and comparable performance data, and the sharing of operational best practices and collaboration on creative solutions to improve performance.

Offload Delay: Offload delay measures the offload of patients at local hospitals, which can impact the resources required and availability to respond to calls.^{xii}

Patient Transport(s): The total number of patients carried in the ambulance during a given call.^{xiii}

Performance Measurement: A method to monitor, observe and describe program implementation. It portrays information to tell that outputs are being delivered as planned, and gives an idea of whether outcomes are occurring. It provides information to be used for evaluation.^{xiv}

Response: See vehicle response.



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Response Time: Response time means the time measured from the time a notice is received to the earlier of either the arrival on-scene of a person equipped to provide any type of defibrillation to sudden cardiac arrest patients or the arrival on-scene of the ambulance crew.^{xv}

Return of Spontaneous Circulation: Signs of the return of spontaneous circulation (ROSC) include breathing (more than an occasional gasp), coughing, or movement. For healthcare personnel, signs of ROSC also may include evidence of a palpable pulse or a measurable blood pressure.^{xvi}

Return Priority Code: The priority code number that is assigned to the call by the ambulance crew. It identifies the priority under which the patient is transported (e.g. a prompt return to a medical facility would be entered as a Code 3).^{xvii}

STEMI: A STEMI (ST-Segment Elevation Myocardial Infarction) is a specific type of myocardial infarction (MI), or in other words a type of heart attack, which demonstrates characteristic ECG (electrocardiogram; a tool to measure electrical activity of the heart) changes including marked elevation in the ST-segment in the cardiac cycle.^{xviii}

STEMI Facilities: A hospital that houses onsite Percutaneous Coronary Intervention (PCI) facilities with an experienced interventional team.^{xix}

Stroke Facilities: Stroke facilities are based on a collaborative model of 11 regional stroke networks. Each regional network is comprised of a Regional Stroke Centre (RSC), District Stroke Centres (DSCs) and community hospitals. The regional stroke networks are collaborative partnerships of care providers that span the care continuum from prevention to community re-engagement. The goal is to coordinate equitable access and improve outcomes for stroke survivors.^{xx}

T1: The time point when a call is entered in to the queue at the Central Ambulance Communications Centre and is available for dispatch.

T2: The time point when ambulance/response unit is notified by the Central Ambulance Communications Centre of a call.

T4: The time point when an ambulance/response unit arrives at the dispatched call's location/scene. This is not the time point when a paramedic is at the patient's side.

T6: The time point when an ambulance arrives at its destination (e.g. hospital).



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PERFORMANCE MEASUREMENT

TabletPCR: An internal tool used to track information and data relevant to calls and patient care reporting.

Unit Utilization: Percentage of staffed vehicles utilized during any unit of time.^{xxi} Note that when UU exceeds a value of 40 per cent, it becomes difficult to ensure an ambulance will be available for the next call in a reasonable time.

Vehicle response: A vehicle response is generated when an ambulance or emergency response unit is dispatched to a call; there can be more than one vehicle response per call (multiple ambulances/emergency response units assigned to the same call; for example, multi-casualty incidents).

YTD: Year-to-date refers to the period extending from the beginning of the current reporting year (January 1st) to the end of the reporting period. The mid-year report's end date is June 30th, and the year-end report's end date is December 31st.



Region of Waterloo

Region of Waterloo * Paramedic Services

PERFORMANCE MEASUREMENT

F. Contact Information

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Accessible formats of this document are available upon request. Please call the Coordinator, Health Communications at 519-575-4400 ext. 2244, (TTY 519-575-4608) to request an accessible format.

Notes

- ⁱ “Definition of cardiac arrest in English”. *Oxford Dictionaries*. Oxford University Press, 2013. Web. 13 August 2013.
- ⁱⁱ Government of Ontario, Ministry of Health and Long-Term Care, Ambulance Call Report Completion Manual (Ontario: Government of Ontario, 2003) 9.
- ⁱⁱⁱ Government of Ontario, Ministry of Health and Long-Term Care, Ambulance Call Report Completion Manual (Ontario: Government of Ontario, 2003) 9.
- ^{iv} Government of Ontario, Ministry of Health and Long-Term Care, Ambulance Call Report Completion Manual (Ontario: Government of Ontario, 2003) 9.
- ^v Government of Ontario, Ministry of Health and Long-Term Care, Ambulance Call Report Completion Manual (Ontario: Government of Ontario, 2003) 9.
- ^{vi} Region of Waterloo. Public Health. Emergency Medical Services. 2011 EMS System Performance. Report PH-12-017. File Code P 05-80. Waterloo: Region of Waterloo, May 8, 2010. Web. 14 August 2013.
- ^{vii} Region of Waterloo. Public Health. Emergency Medical Services. 2011 EMS System Performance. Report PH-12-017. File Code P 05-80. Waterloo: Region of Waterloo, May 8, 2010. Web. 14 August 2013.
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- ^{ix} “Defibrillator”. *Merriam-Webster*. Merriam Webster, Incorporated, 2013. Web. 13 August 2013.
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- ^{xi} “Definition of indicator in English”. *Oxford Dictionaries*. Oxford University Press, 2013. Web. 14 August 2013.

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- ^{xii} “What is Service?”. *OMBI Ontario Municipal CAO’s Benchmarking Initiative*. Ontario Municipal CAO’s Benchmarking Initiative, 2012. Web. 13 August 2013.
- ^{xiii} Government of Ontario, Ministry of Health and Long-Term Care, Ambulance Call Report Completion Manual (Ontario: Government of Ontario, 2003) 11.
- ^{xiv} Schacter, Mark. Kronick, Murray. “Results-Based Management 101”. *Performance and Planning Exchange*. Performance and Planning Exchange, 2010-2011. Web. 14 August 2013.
- ^{xv} “Ambulance Act”. *ServiceOntario e-Laws*. Government of Ontario, 2013. Web. 14 August 2013.
- ^{xvi} “Cardiac Arrest and Cardiopulmonary Resuscitation Outcome Reports”. *American Heart Association*. American Heart Association, Inc., 2013. Web. 13 August 2013.
- ^{xvii} Government of Ontario, Ministry of Health and Long-Term Care, Ambulance Call Report Completion Manual (Ontario: Government of Ontario, 2003) 10.
- ^{xviii} “Cardiac Care STEMI Program Frequently Asked Questions”. *Toronto EMS News & Video*. Toronto Emergency Medical Services, 1998-2013. Web. 13 August 2013.
- ^{xix} “CCN Documents Optimizing Access to Primary PCI for ST Elevation Myocardial Infarction”. *Cardiac Care Network*. Cardiac Care Network of Ontario, 2013. Web. 14 August 2013.
- ^{xx} “The Ontario Stroke System (OSS)”. *Ontario Stroke Network Advancing the Ontario Stroke System*. Ontario Stroke Network, 2010. Web. 13 August 2013.
- ^{xxi} Region of Waterloo. Public Health. Emergency Medical Services. Emergency Medical Services (EMS) Master Plan. Report PH-07-061. File Code P 05-01. Waterloo: Region of Waterloo, August 4, 2007. Web. 14 August 2013.