

Stroke Mortality

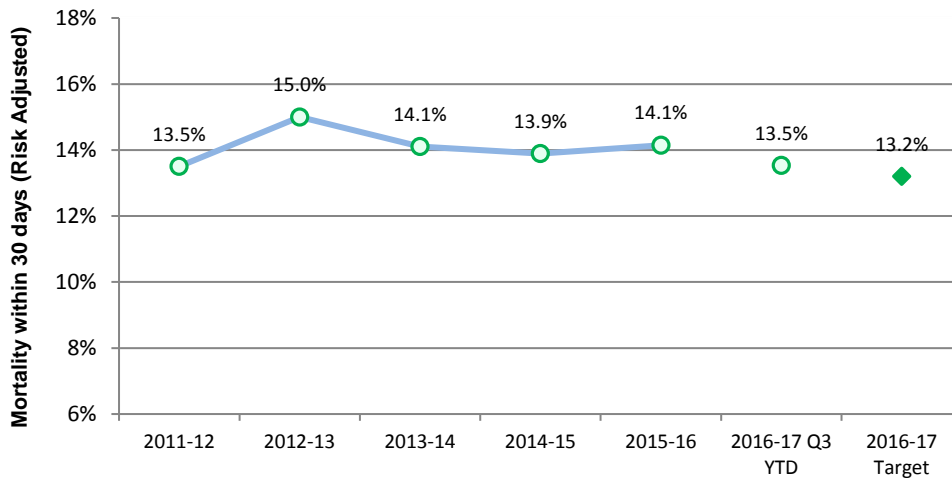
Measure Definition

The probability of dying in hospital within 30 days for patients admitted because of stroke. This measure represents hospital deaths occurring within 30 days of first admission to a hospital with a diagnosis of stroke. This measure is adjusted for age, sex and other conditions.

Understanding this Measure

Stroke is a significant cause of death and disability in the Canadian population. This rate may be influenced by a number of factors, including effectiveness of emergency treatments and quality of care in hospitals. Note: This measure is reported a quarter later due to the requirement to followup with patients after the end of the reporting quarter.

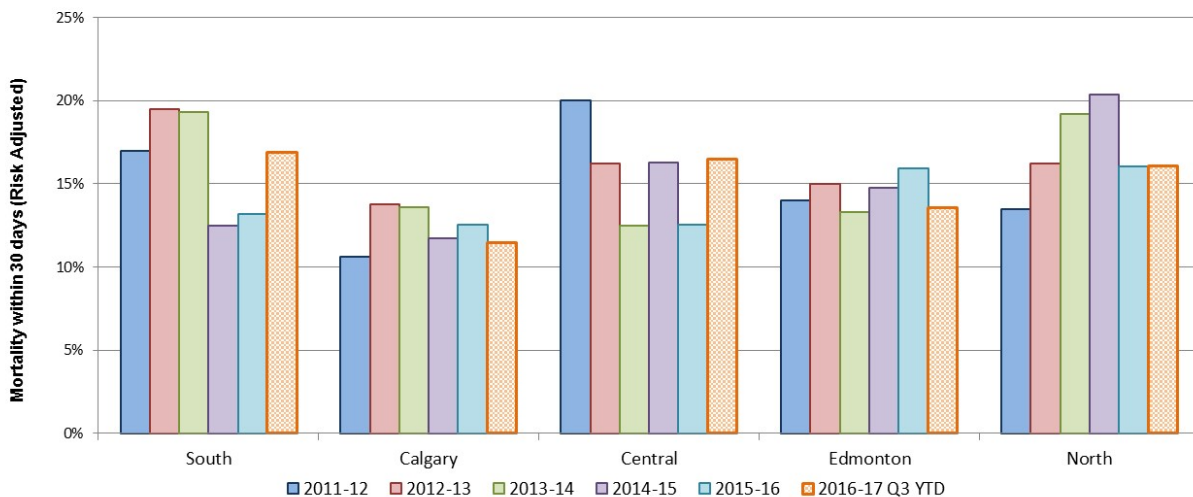
Stroke Mortality - Annual



How Do We Compare?

Alberta ranked 4th best nationally out of ten provinces, and the same as the national rate in 2014-15.

Stroke Mortality - by Zone



Stroke Mortality

HIGHLIGHTS

AHS aims to reduce median door-to-needle (DTN) time—the total time from when a patient enters the emergency room, is given a stroke diagnosis, and receives tPA—to 60 minutes or less. Administering the clot-busting drug tPA within 60 minutes of a stroke has shown to reduce mortality, reduce treatment complications, lessen disabilities and shorten inpatient hospital stays.

The Cardiovascular Health and Stroke Strategic Clinical Network has undertaken several initiatives related to improving stroke outcomes:

- Roll-out of the University of Calgary's Quality Improvement & Clinical Research (QuICR) initiative to complete work with AHS sites to reduce median DTN time to improve stroke outcomes. The faster patients are treated, the greater the probability for improved functional health outcomes. Results show that the median DTN time improved from 45 minutes with 65% treated in 60 minutes or less (October 2015) to 36 minutes with 82% treated in 60 min or less (February 2017).
- Endovascular therapy is a stroke treatment that removes the large stroke-causing clots from the brain, and substantially improves the chance for a better outcome for patients. The Endovascular Reperfusion Alberta project was implemented in the zones to improve endovascular therapy access for patients with acute ischemic stroke to reduce mortality and disability.
- The Stroke Action Plan (SAP) addresses the quality of and access to stroke care in rural and small urban stroke centres across Alberta. SAP includes initiatives such as creating standards for stroke unit equivalent care for small rural centres and facilitating early supported discharge from acute care by delivering expert stroke rehabilitation into community-based services. This project has transitioned to zone operations for implementation.
- Vascular Risk Reduction (VRR) consists of a series of projects with a focus on: 1) vascular risk-factor screening, case finding and early management in various community settings such as pharmacies and industry worksites; 2) integrating approaches to VRR; 3) effective and consistent knowledge translation with common messaging among internal and external stakeholders.

SUMMARY OF RESULTS

The most recent data for this measure is a quarter behind. This analysis is based on Q3 YTD 2016-17.

Calgary Zone achieved target for Q3 YTD. Provincial, Edmonton and North Zones showed improvement from the same period as last year. South and Central Zone results deteriorated compared to the same period as last year.

This measure shows high sensitivity to variation in number of deaths from quarter to quarter. Working on understanding root cause if present with cases.

In monitoring these measures at a site level, it is important to examine longer term trends over time. We expect there to be fluctuations in hospitals due to smaller sites having low number of discharges and therefore more susceptible to variations. AHS monitors these fluctuations to see if deterioration in performance represents a trend over time or part of expected variation. The fluctuation is within normal range.

Stroke Mortality

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Stroke Mortality within 30 days	2013-14	2014-15	2015-16	Q3 YTD		Trend	2016-17 Target
				2015-16 Last Year	2016-17 Current		
Trend: ★ Target Achieved; ✓ Improving; ⇔ Stable; ✖ Performance not improving							
Provincial	14.1%	13.9%	14.1%	14.8%	13.5%	✓	13.2%
South Zone	19.3%	12.5%	13.2%	15.1%	16.9%	✖	13.8%
Chinook Regional Hospital	22.2%	12.4%	15.2%	17.7%	17.5%	✓	14.9%
Medicine Hat Regional Hospital	11.4%	6.7%	12.0%	12.8%	9.7%	★	10.3%
All Other Hospitals	23.6%	27.2%	8.4%	10.6%	29.5%	✖	18.3%
Calgary Zone	13.6%	11.7%	12.6%	12.8%	11.5%	★	12.9%
Foothills Medical Centre	13.0%	12.1%	12.4%	12.6%	11.7%	★	13.0%
Peter Lougheed Centre	21.9%	7.0%	14.9%	15.4%	20.1%	✖	17.6%
Rockyview General Hospital	7.3%	8.5%	11.3%	13.6%	8.3%	★	9.1%
South Health Campus	21.9%	12.0%	10.8%	8.5%	9.9%	★	12.1%
All Other Hospitals	25.4%	21.6%	20.9%	23.4%	8.4%	★	13.0%
Central Zone	12.5%	16.3%	12.5%	14.4%	16.5%	✖	14.1%
Red Deer Regional Hospital Centre	12.2%	13.8%	10.2%	11.6%	13.8%	★	13.8%
All Other Hospitals	12.9%	18.7%	17.2%	19.7%	21.7%	✖	14.4%
Edmonton Zone	13.3%	14.7%	15.9%	16.5%	13.6%	✓	13.4%
Grey Nuns Community Hospital	8.9%	9.5%	7.8%	8.3%	8.1%	★	10.0%
Misericordia Community Hospital	12.5%	13.3%	11.9%	15.1%	2.7%	★	13.0%
Royal Alexandra Hospital	16.7%	19.6%	11.8%	13.5%	14.1%	★	15.1%
Sturgeon Community Hospital	17.6%	16.0%	14.2%	14.1%	4.3%	★	18.8%
University of Alberta Hospital	13.6%	15.3%	18.8%	18.9%	16.2%	✓	13.9%
All Other Hospitals	17.3%	7.0%	22.5%	23.4%	9.4%	★	14.0%
North Zone	19.2%	20.3%	16.1%	16.4%	16.1%	✓	13.2%
Northern Lights Regional Health Centre	9.4%	0.0%	0.0%	0.0%	N/A	N/A	8.4%
Queen Elizabeth II Hospital	23.6%	23.5%	16.6%	15.7%	13.5%	★	15.0%
All Other Hospitals	18.4%	22.8%	18.2%	18.9%	16.1%	✓	13.3%

* "Stable" trend indicates when current period performance is ≤ 3% from the same time period as last year.

Stroke Cases (Index)*	2013-14	2014-15	2015-16	Q3 YTD	
				2015-16 Last Year	2016-17 Current
Provincial	3,316	3,568	3,725	2,733	2,793
South Zone	242	285	249	190	199
Calgary Zone	1,251	1,311	1,392	1,017	992
Central Zone	299	326	372	267	270
Edmonton Zone	1,305	1,410	1,493	1,099	1,126
North Zone	219	236	219	160	206