# Virginia Stroke Care Quality Improvement Initiative Update

**VSSTF Quarterly Meeting** 

October 16, 2020

Patrick Wiggins, MPH
Disease Prevention Strategist
Virginia Department of Health



#### Legislation

- **Code of Virginia 32.1-111.15:1**
- HB 1197 and SB 867 | Effective 1/1/2019
- Department responsible for stroke care quality improvement; sharing of data and information.
- 1. Implement systems to collect data and information related to stroke care.
- 2. Facilitate information & data sharing and collaboration among hospitals and providers.
- 3. Apply evidence-based treatment guidelines for transitioning patients to community-based follow**up care** following acute treatment for stroke.
- 4. Establish a process for **continuous quality improvement** for the delivery of stroke care.

#### VIRGINIA ACTS OF ASSEMBLY - 2018 SESSION

#### CHAPTER 276

An Act to amend the Code of Virginia by adding in Article 2.1 of Chapter 4 of Title 32.1 a section numbered 32.1-111.15:1, relating to stroke care quality improvement.

H 1197

enacted are General Assembly of Virginia: he words of Virginia is amended by adding in Article 21 of Chapter 4 of ambered 32-11115:1 as follows:

\$2.1-111.15:1. Department responsible for stroke care quality improvement; sharing of da

A. The Department shall be responsible for stroke care quality improvement initiatives nmonwealth. Such initiatives shall include: Implementing systems to collect data and information about stroke care in

acilitating information and data sharing and collaboration among hospitals and

improve the quality of stroke care in the Commonwealth: the application of evidence-based treatment guidelines for

n care following acute treatment for stroke; and orunnee with subsection C

statewide system for stroke response and treatment in a B. The Department shall implement systems to collect data and information related to stroke care (t that are nationally recognized data set platforms with confidentiality standards approved by the Centers for Medicare and Medicaid Services or consistent with the Get With The Guidelines-Stroke registry platform from hospitals designated as comprehensive stroke centers, primary stroke centers, or acute stroke-ready hospitals and emergency medical services agencies in the Commonwealth and (ii) from every primary stroke center with supplementary levels of stroke care distinction in the Commonwealth. Every hospital designated as a comprehensive stroke center, primary stroke center, or primary stroke center with supplementary levels of stroke care distinction shall report data and information described in clauses (t) and (tt) to the Department. The Department shall take steps to encourage hospitals designated as acute stroke-ready hospitals and emergency medical services agencies to report data and information described in clause (i) to the Department.

C. The Department shall develop a process for continuous quality improvement for the delivery of stroke care provided by the statewide system for stroke response and treatment, which shall include:

Collection and analysis of data related to stroke care in the Commonwealth;

2. Identification of potential interventions to improve stroke care in specific geographic areas of the

3. Development of recommendations for improvement of stroke care throughout the Commonwealth D. The Department shall make information contained in the systems established pursuant to subsection B and data and information collected pursuant to subsection C available to licensed hospitals and the Virginia Stroke Systems Task Force, and, upon request, to emergency medical services agencies, regional emergency medical services councils, the State Emergency Medical Services Advisory Board, and other entities engaged in the delivery of emergency medical services in the Commonwealth to facilitate the evaluation and improvement of stroke care in the Commonwealth.

E. The Department shall report to the Governor and the General Assembly annually on July 1 on stroke care improvement initiatives undertaken in accordance with this section. Such report shall include

a summary report of the data collected pursuant to this section.

F. Nothing in this article shall require or authorize the disclosure of confidential information in violation of state or federal law or regulations, including the Health Insurance Portability and Accountability Act, 2 U.S.C. § 1320d et seq.
2. That the provisions of the first enactiment of this act shall become effective on January 1, 2019.

3. That the Department of Health shall convene a group of stakeholders, which shall include representatives of (i) hospital systems, including at least one hospital system with at least six or more stroke centers in the Commonwealth, recommended by the Virginia Hospital and Healthcare Association; (ii) the Virginia Stroke Systems Task Force; and (iii) the American Heart Association/American Stroke Association, to advise on the implementation of the provisions of this



#### **Recent Timeline Overview**

February September **Look Ahead: Enhancing Transitions of Care Models** EMS and Hospital Stroke Inventory Survey delayed due to COVID-19 Priority geographic areas identified. Hospitals serving those areas identified Completed the 2019-2020 Stroke Report to the General Assembly from March – July 2020



Region	Locality	Local Health Department	Mortality Combined (ICH & AIS)	Intracerebral Hemorrhage (ICH)	Acute Ischemic Stroke (AIS)
Central	Greensville County	Crater	64.76	14.78	49.98
	Brunswick County	Southside	59.44	6.11	53.33
	Nottoway County	Piedmont	59.13	12.02	47.11
	Petersburg City	Crater	58.65	18.75	39.90
	Surry County	Crater	57.96	23.70	34.26
	Mecklenburg				
	County	Southside	56.97	13.55	43.41
	Hopewell City				
		Crater	49.93	14.03	35.90

Note: Age-adjusted rate per 100,000 population.



				Hospita	l 1	Hospit	al 2	Hospit	al 3
LOCALITY	FIPS	Health District	Region	Hospital Name	% Stroke Hospitaliza tions in Locality	Hospital Name	% Stroke Hospitaliza tions in Locality	Hospital Name	% Stroke Hospitaliza tions in Locality
								Southern	
				VCU Health		Southside Regional		Virginia Regional	
Greensville County	51081	Crater	Central	System	45.1%	Medical Center	18.5%	Medical Center	16.9%
				VCU Community Memorial		VCU Health		Southside Regional	
Brunswick County	51025	Southside	Central	Hospital	34.4%	System	34.1%	Medical Center	6.7%
				CJW Medical		Centra Southside Community		Bon Secours St. Francis Medical	
Nottoway County	51135	Piedmont	Central	Center	26.5%	Hospital	20.7%	Center	14.1%
				Southside Regional Medical		VCU Health		CJW Medical	
Petersburg City	51730	Crater	Central	Center	59.5%	System	20.0%	Center	12.7%
				Sentara Obici		John Randolph		Riverside Regional	
Surry County	51181	Crater	Central	Hospital	27.1%	Medical Center	15.3%	Medical Center	15.3%
				VCU Community  Memorial		VCU Health		Sentara Halifax	
Mecklenburg County	51117	Southside	Central	Hospital	32.4%	System	28.6%	Regional Hospital	15.4%
	31117	334113140	CCITCIG	riospitai	32.470	3,300111	20.070	Southside	13.470
				John Randolph		CJW Medical		Regional	
Hopewell City	51670	Crater	Central	Medical Center	50.9%	Center	25.8%	Medical Center	11.6%

Note: The reported hospitalization data for this report represent rates obtained based on VHI data available in March 2020.



Region	Locality	Local Health Department	Mortality Combined (ICH & AIS)	Intracerebral Hemorrhage (ICH)	Acute Ischemic Stroke (AIS)
Eastern	Franklin City	Western Tidewater	93.20	15.17	78.03
	Portsmouth City	Portsmouth	52.67	13.65	39.02
	Lancaster County	Three Rivers	52.66	12.58	40.09
	Norfolk City	Norfolk	50.01	13.43	36.58
	Hampton City	Hampton	47.33	11.58	35.75
	Accomack County	Eastern Shore	45.56	11.98	33.57
	Mathews County	Three Rivers	44.48	13.89	30.59

Note: Age-adjusted rate per 100,000 population.



				Hospita	l 1	Hospit	al 2	Hospit	al 3
LOCALITY	FIPS	Health District	Region	Hospital Name	% Stroke Hospitaliza tions in Locality	Hospital Name	% Stroke Hospitaliza tions in Locality	Hospital Name	% Stroke Hospitaliza tions in Locality
				6 11		Sentara			
		Western		Southampton Memorial		Norfolk General		Sentara Obici	
Franklin City	51620	Tidewater	Eastern	Hospital	37.1%	Hospital	20.0%	Hospital	16.8%
	02020	110000000	20000111		071270	Sentara	2010/0	. respica.	201074
				Bon Secours		Norfolk		Bon Secours	
		Portsmout		Maryview		General		DePaul Medical	
Portsmouth City	51740	h	Eastern	Medical Center	64.5%	Hospital	14.6%	Center	7.4%
				Day Caasiin		Bon Secours			
		Three		Bon Secours Rappahannock		Memorial Regional		Bon Secours St.	
Lancaster County	51103	Rivers	Eastern	General Hospital	18.8%	Medical Center	18.1%	Mary's Hospital	16.4%
,								Bon Secours	
				Sentara Norfolk		Sentara Leigh		DePaul Medical	
Norfolk City	51710	Norfolk	Eastern	General Hospital	42.3%	Hospital	25.3%	Center	24.8%
								Sentara	
				Contava Caranlay		Riverside		Norfolk General	
Hampton City	51650	Hampton	Eastern	Sentara Careplex Hospital	57.8%	Regional Medical Center	34.0%	Hospital	4.0%
Transport City	31030	Hampton	Lasterri	Tiospitai	37.870	Wicalcal certici	34.070	Sentara	4.070
				Riverside Shore		Riverside		Norfolk	
		Eastern		Memorial		Regional		General	
Accomack County	51001	Shore	Eastern	Hospital	78.6%	Medical Center	10.8%	Hospital	4.0%
						Riverside			
Nash and Canal	F111F	Three	Factoria	Riverside Walter	64.00/	Regional	20.00/	VCU Health	2.00/
Mathews County	51115	Rivers	Eastern	Reed Hospital	61.8%	Medical Center	29.8%	System	2.6%

Note: The reported hospitalization data for this report represent rates obtained based on VHI data available in March 2020.



Region	Locality	Local Health Department	Mortality Combined (ICH & AIS)	Intracerebral Hemorrhage (ICH)	Acute Ischemic Stroke (AIS)
Northern	Manassas City	Prince William	49.75	12.40	37.35
	Fairfax City	Fairfax	41.11	10.19	30.92

Note: Age-adjusted rate per 100,000 population.



				Hospita	l 1	Hospital 2		Hospital 3	
					% Stroke		% Stroke		% Stroke
					Hospitaliza		Hospitaliza		Hospitaliza
		Health			tions in		tions in		tions in
LOCALITY	FIPS	District	Region	Hospital Name	Locality	Hospital Name	Locality	<b>Hospital Name</b>	Locality
				Novant Health					
		Prince		Prince William		Inova Fairfax		Prince William	
Manassas City	51683	William	Northern	Medical Center	41.6%	Hospital	35.2%	Hospital	5.4%
				Inova Fairfax		Inova Fair Oaks		Virginia	
Fairfax City	51600	Fairfax	Northern	Hospital	65.7%	Hospital	22.6%	Hospital Center	3.5%

Note: The reported hospitalization data for this report represent rates obtained based on VHI data available in March 2020.



Region	Locality	Local Health Department	Mortality Combined (ICH & AIS)	Intracerebral Hemorrhage (ICH)	Acute Ischemic Stroke (AIS)
Northwest		Central			
	Highland County	Shenandoah	60.66	11.94	48.72
		Central			
	<b>Lexington City</b>	Shenandoah	60.00	9.65	50.35
		Central			
	Buena Vista City	Shenandoah	53.67	12.07	41.61
		Central			
	Harrisonburg City	Shenandoah	48.99	13.01	35.97
		Central			
	Staunton City	Shenandoah	48.17	15.06	33.12
	Warren County	Lord Fairfax	44.16	7.47	36.69
	King William County	Rappahannock	44.14	11.68	32.45
	<b>Caroline County</b>	Rappahannock	42.46	10.43	32.03

Note: Age-adjusted rate per 100,000 population.



					_	_				
				Hospita		Hospit	1	Hospit		
					% Stroke		% Stroke		% Stroke	
					Hospitaliza		Hospitaliza		Hospitaliza	
		Health			tions in		tions in		tions in	
LOCALITY	FIPS	District	Region	Hospital Name	Locality	Hospital Name	Locality	Hospital Name	Locality	
		Central				University of				
		Shenandoa				Virginia		Sentara RMH		
Highland County	51091	h	Northwest	Augusta Health	46.3%	Medical Center	34.2%	Medical Center	7.3%	
		Central		Carilion						
		Shenandoa		Stonewall		Carilion				
Lexington City	51678	h	Northwest	Jackson Hospital	36.1%	Medical Center	34.4%	Augusta Health	15.4%	
						Carilion				
		Central				Stonewall				
		Shenandoa		Carilion Medical		Jackson				
Buena Vista City	51530	h	Northwest	Center	42.8%	Hospital	28.3%	Augusta Health	13.8%	
						Sentara				
		Central				Rockingham		University of		
		Shenandoa		Sentara RMH		Memorial		Virginia		
Harrisonburg City	51660	h	Northwest	Medical Center	57.8%	Hospital	15.1%	Medical Center	12.6%	
		Central				University of				
		Shenandoa				Virginia		Sentara RMH		
Staunton City	51790	h	Northwest	Augusta Health	76.5%	Medical Center	19.1%	Medical Center	1.2%	
						Valley Health				
				Valley Health		Warren				
		Lord		Winchester		Memorial		Inova Fairfax		
Warren County	51187	Fairfax	Northwest	Medical Center	65.9%	Hospital	11.0%	Hospital	8.9%	
				Bon Secours		Sentara				
				Memorial		Williamsburg				
		Rappahann		Regional Medical		Regional		VCU Health		
King William County	51101	ock	Northwest	Center	50.2%	Medical Center	18.5%	System	10.5%	
						Bon Secours				
				Mary		Memorial		Spotsylvania		
		Rappahann		Washington		Regional		Regional		
Caroline County	51033	ock	Northwest	Hospital	37.4%	Medical Center	18.4%	Medical Center	13.5%	

Note: The reported hospitalization data for this report represent rates obtained based on VHI data available in March 2020.



Region	Locality	Local Health Department	Mortality Combined (ICH & AIS)	Intracerebral Hemorrhage (ICH)	Acute Ischemic Stroke (AIS)
Southwest	Martinsville City	West Piedmont	84.64	26.86	57.79
	<b>Covington City</b>	Alleghany	74.77	27.28	47.48
	Galax City	Mount Rogers	70.09	20.14	49.95
	Radford City	New River	67.57	24.22	43.35
	Lynchburg City	Central Virginia	61.13	14.51	46.61
	Appomattox County	Central Virginia	59.56	23.44	36.12
		Pittsylvania-			
	Danville City	Danville	54.72	14.07	40.65
	Salem City	Alleghany	51.26	12.40	38.87
	Amherst County	Central Virginia	50.55	10.34	40.21
	Wythe County	Mount Rogers	47.76	13.19	34.57

Note: Age-adjusted rate per 100,000 population.



				<u> </u>			<u> </u>	1	
				Hospital	1	Hospita	·		
		Health			% Stroke Hospitalizatio		% Stroke Hospitalizatio		% Stroke Hospitalizatio
LOCALITY	FIPS	District	Region	Hospital Name	ns in Locality	Hospital Name	ns in Locality	Hospital Name	ns in Locality
				Memorial Hospital of				Mem. Hosp	
		West		Martinsville & Henry		Carilion Medical		Martinsville&Henr	
Martinsville City	51690	Piedmont	Southwest	County	66.8%	Center	19.1%	y Co.	8.3%
				LewisGale Medical		LewisGale Hospital		Carilion Medical	
Covington City	51580	Alleghany	Southwest	Center	34.6%	- Alleghany	31.5%	Center	17.9%
								Carilion New River	
				Twin County		Carilion Medical	2.21	Valley dba St.	
Galax City	51640	Mount Rogers	Southwest	Regional Hospital	85.7%	Center	6.8%	Albans	2.8%
						Carilion New River			
				Carilion Medical		Valley dba St.		Carilion New River	
Radford City	51750	New River	Southwest	Center	35.0%	Albans	30.0%	Valley Med. Ctr.	7.9%
				Centra Health -		Centra Health dba			
		Central		Virginia Baptist &		Virginia Baptist			
Lynchburg City	51680	Virginia	Southwest	Lynchburg General	54.3%	Hospital	20.6%	Centra Health	10.2%
				Centra Health -		Centra Health dba			
		Central		Virginia Baptist &		Virginia Baptist			
Appomattox County	51011	Virginia	Southwest	Lynchburg General	48.7%	Hospital	19.6%	Centra Health	8.4%
								Centra Health -	
		Pittsylvania-		Danville Regional		Carilion Medical		Virginia Baptist &	
Danville City	51590	Danville	Southwest	Medical Center	83.0%	Center	9.8%	Lynchburg General	2.1%
								University of	
				LewisGale Medical		Carilion Medical		Virginia Medical	
Salem City	51775	Alleghany	Southwest	Center	69.4%	Center	27.7%	Center	1.8%
				Centra Health -		Centra Health dba		Centra	
		Central		Virginia Baptist &		Virginia Baptist		Health/Virginia	
Amherst County	51009	Virginia	Southwest	Lynchburg General	55.2%	Hospital	20.4%	Baptist Hospital	8.7%
				Wythe County		Carilion Medical		LewisGale Medical	
Wythe County	51197	Mount Rogers	Southwest	Community Hospital	42.0%	Center	28.1%	Center	6.1%

Note: The reported hospitalization data for this report represent rates obtained based on VHI data available in March 2020.



#### Thank you!

#### **Contact Information**:

Patrick Wiggins, MPH

Patrick.Wiggins@vdh.virginia.gov

(804)864 - 7710

