

Tenecteplase Pilot

HCA Healthcare | Capital Division

***Mission:** Above all else, we are committed to the care and improvement of human life.*

Presentation for the Virginia Stroke System Task Force

HCA Capital Division Tenecteplase Pilot

Presenters:

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Thrombolytic

- Genetically modified variant of alteplase
- Has greater fibrin specificity
- Longer $T^{1/2}$ that permits bolus administration



Advantages

- Quicker preparation
- **Single bolus** is administered intravenously over 5 seconds
- No infusion dose
- No need for saline flush post infusion



Outcomes

- As effective and safe as alteplase
- Better early reperfusion and functional outcome than alteplase
- Hemorrhagic conversion 2-3%
- mRS scale favorable at 90 days showing decrease disability

Why the Change?

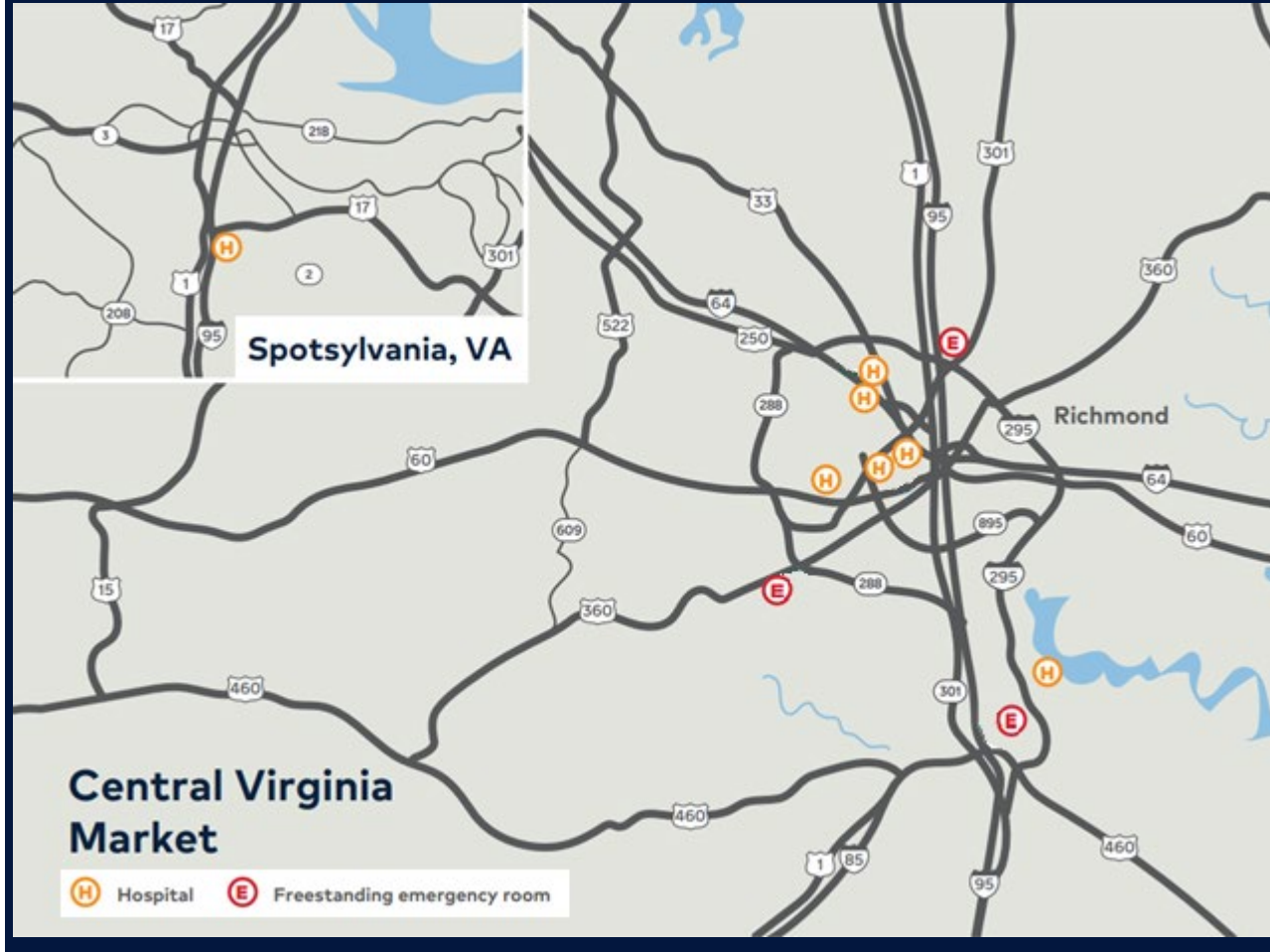
Quality

Safety

Outcomes

- **Extensive literature and studies reviewed**
 - An off-label use in the treatment of ischemic strokes with a Last Known Well (LKW) of 0-4.5 hours that is a new recommendation listed by the **AHA 2019 Guidelines, Joint Commission and DNV**
- **Safety Offerings**
 - Offered as a bolus 0.25mg/kg, no infusion
 - Easier to mix and administer to patients
 - Limits errors with EMS during patient transportation (no drips)
 - Same patient monitoring and contraindications as alteplase
- **Outcomes**
 - Better early reperfusion and functional outcome than alteplase
 - Lower Median DTN time
 - Higher % DTN under 60 minutes

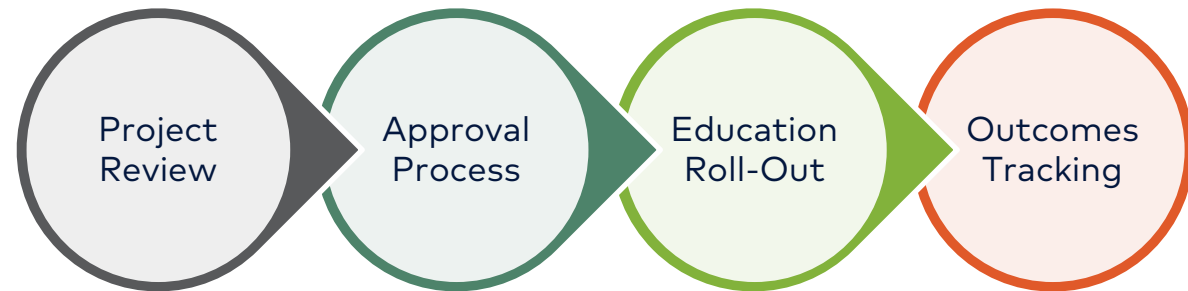
HCA Richmond Market Pilot



Key Stakeholders



Facility Execution Steps



HCA Richmond Market Tenecteplase Pilot | Implementation & Outcomes

Go Live Oct 1st, 2020

- ✓ Chippenham Hospital
- ✓ Johnston-Willis Hospital
- ✓ Swift Creek FSER

Go Live Mar 3rd, 2021

- ✓ Spotsylvania Regional Medical Center
- ✓ John Randolph Medical Center
- ✓ TriCities FSER

Dec 31st, 2021

Scale across 15 remaining sites

Go Live Jan 12th, 2021

- ✓ Henrico Doctors' Hospital – Forest
- ✓ Parham Doctors' Hospital
- ✓ Retreat Doctors' Hospital
- ✓ Hanover FSER

July 16th, 2021

Present findings at Virginia Stroke System Task Force

Critical Success Factors

- Neurology engagement/ leadership
- Thorough education of ER, RNs, EMS and Neurology (at least one month per location)
- Strong engagement from Pharmacy and Quality (Division & Facility)

Feedback

- “So much **easier** to calculate & administer!”
- “I don’t feel cramped in CT suite when mixing!”
- “Staff seem **excited and engaged.**”
- “**Outcome are inline with what we see in Alteplase patients.**”

Appendix



- **As effective and as safe as tPA**
 - NOR-TEST Trial and EXTEND-IA TNKase Trial
- **Better early reperfusion and functional outcomes than tPA**
 - EXTEND-IA TNKase Trial
- **No added benefit with higher dosing (0.4mg/kg vs. 0.25mg/kg)**
 - EXTEND-IA TNKase Trial

Tenecteplase | References

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5. Campbell BCV, Mitchell PJ, Churilov L, Yassi N, Kleinig TJ, et al. [Effect of intravenous tenecteplase dose on cerebral reperfusion before thrombectomy in patients with large vessel occlusion ischemic stroke: the extend-ia tnk part 2 randomized clinical trial](#). *JAMA*. 2020;323(13):1257-1265.
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