Patient Name: _____ DOB: _____ Date: _____

South Carolina EMS R.A.C.E. Stroke Scale

Rapid **A**rterial o**C**clusion **E**valuation Scale

ITEM	Instruction	Result	Score	NIHSS Equivalent
Facial Palsy	Ask patient to show their teeth (smile)	**Absent** (symmetrical movement) **Mild** (slight asymmetrical) **Moderate to Severe** (completely asymmetrical)	**0** **1** **2**	0-3
Arm Motor Function	Extending the arm of the patient 90° (if sitting) or 45° (if supine)	**Normal** to **Mild** (limb upheld more than **10** seconds) **Moderate** (limb upheld less than **10** seconds) **Severe** (patient unable to raise arm against gravity)	**0** **1** **2**	0-4
Leg Motor Function	Extending the leg of the patient 30° (in supine)	**Normal** to **Mild** (limb upheld more than **5** seconds) **Moderate** (limb upheld less than **5** seconds) **Severe** (patient unable to raise leg against gravity)	**0** **1** **2**	0-4
Head & Gaze Deviation	Observe eyes and head deviation to one side	**Absent** (eye movements to both sides were possible and no head deviation was observed) **Present** (eyes and head deviation to one side was observed)	**0** **1**	0-2
Aphasia (R side)	Difficulty understanding spoken or written words. Ask patient to follow two simple commands: 1. Close your eyes. 2. Make a fist.	**Normal** (performs both tasks requested correctly) **Moderate** (performs only 1 of 2 tasks requested correctly) **Severe** (Cannot perform either task requested correctly)	**0** **1** **2**	0-2
Agnosia (L side)	Inability to recognize familiar objects. Ask patient: 1. "Whose arm is this?" (while showing the affected arm) 2. "Can you move your arm?"	**Normal** (recognizes arm, and attempts to move arm) **Moderate** (does not recognize arm **or** is unaware of arm) **Severe** (does not recognize arm **and** is unaware of arm)	**0** **1** **2**	0-2
		RACE SCALE TOTAL		

Any score above **4** is a Stroke Alert and high likelihood of an LVO

- **R.A.C.E.** is based on an abbreviated version of the **NIHSS**, the "gold standard" for evaluating stroke victims.
- The maximum score is **9** (not **11**) because the evaluation is done on the left or right side not both simultaneously.
- The **R.A.C.E.** is a 5 of 6 item scale. The last item is 1 of 2 based on which side the patient has deficits on previous scale items.
- The **NIHSS** equivalent is provided for the benefit of receiving facility. The **NIHSS** score may be higher than the "snap shot" provided in the **R.A.C.E.** because the **NIHSS** evaluates additional areas not covered in the **R.A.C.E.** which is short by design for EMS field use.
- The **R.A.C.E.** is a universal ***quantitative*** tool that is needed to determine the ***severity*** of a stroke and to identify strokes with large vessel occlusions (LVO) which would benefit going to a Comprehensive Stroke Center (CSC). This is similar to a 12-lead EKG identifying a STEMI and being transported to a PCI Cardiac Center for intervention.
- The Cincinnati (CPSS), the F.A.S.T., the Miami (MENDS), the Los Angeles (LAPSS) stroke scales are good scales that offer high degree of sensitivity for strokes, but they are all ***qualitative*** scores (positive or negative) and not ***quantitative*** (severity).
- The cut-score of 4 is based on the significant global accuracy of **R.A.C.E.** predicting an LVO and its close correlation to the **NIHSS**.
- A free online tool is available to calculate a **R.A.C.E.** score at: http://www.rccc.eu/race/RACEen.html
- For the study behind the **R.A.C.E.** see http://stroke.ahajournals.org/content/45/1/87.full
- For more information on the South Carolina R.A.C.E. tool please contact Arnold Alier at aliera@dhec.sc.gov