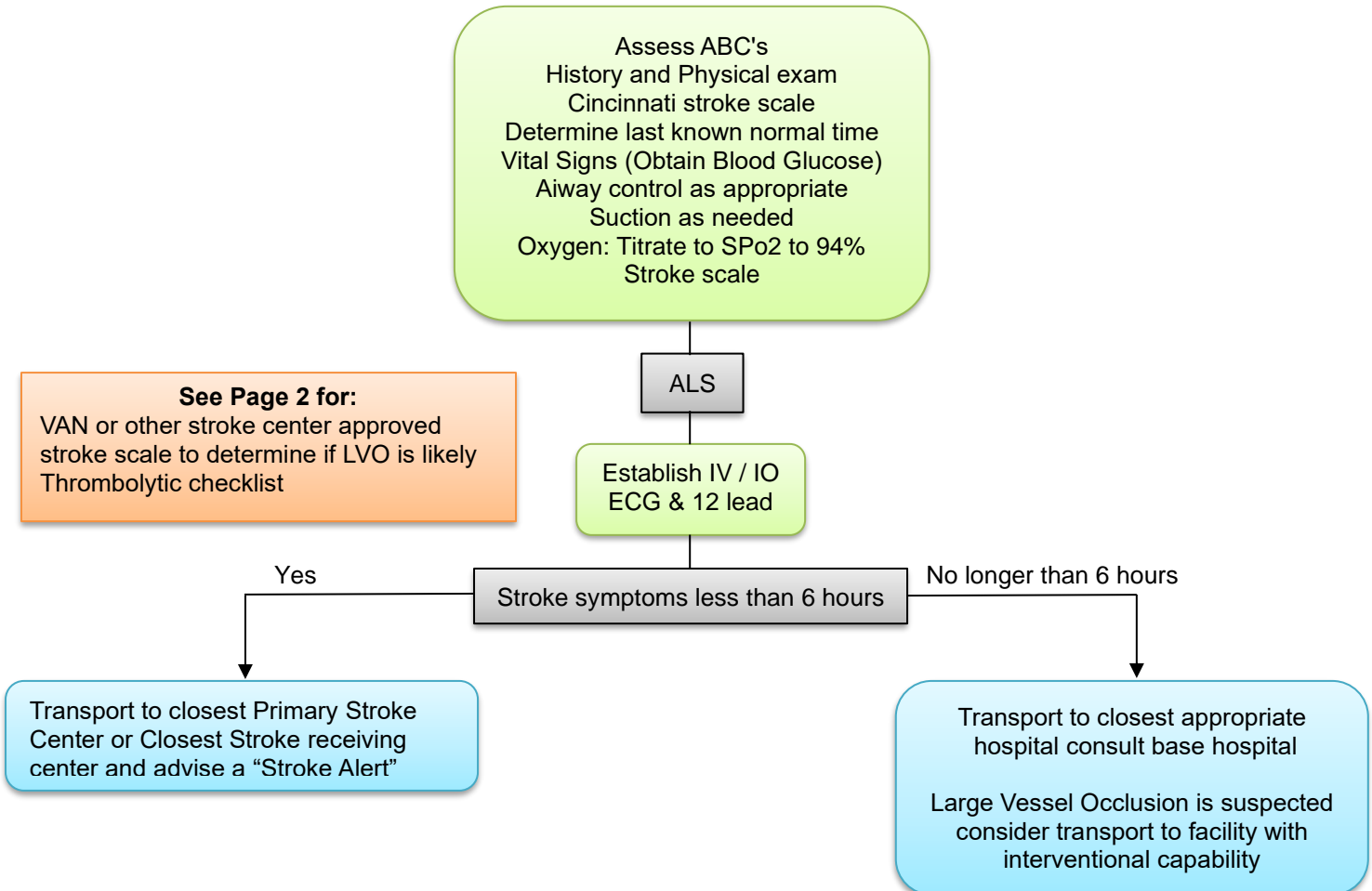
 NOR-CAL EMS	1206	Stroke
Nor-Cal EMS Policy & Procedure Manual	Treatment Guidelines	
Effective Date: 12/07/2020	Next Revision: 12/07/2023	
Approval: Jeffrey Kepple MD – MEDICAL DIRECTOR	SIGNATURE ON FILE	

Authority

Health and Safety Code Division 2.5, California Code of Regulations, Title 22, Division 9.



Attention

Consider this in your transport decision: Stroke receiving centers that utilize interventional radiology for Thrombectomy are able to treat Large Vessel Occlusions (LVO) 24-48 hours after onset of symptoms.

As of 9/2020 Thrombectomy capable stroke centers:

Mercy Medical Center	Redding
Renown Medical	Center Reno
Mercy San Juan	Sacramento

VAN Stroke Assessment
Perform only if arm drift or weakness is present

V

Visual Disturbance

- Any partial vision, blindness, or double-vision?
- Can't count your fingers held up at visual quadrants?

If "yes" to any of these, VAN is positive. Otherwise, go to Aphasia.

A

Aphasia

- Can't speak or unable to form words? (*Don't include slurred speech*)
- Can't follow two simple commands (*smile, wave, grip, point*).
- Unable to recognize two simple objects (*pen, hat, shirt, dog*)

If "yes" to any of these, VAN is positive. Otherwise, go to Neglect.

N

Neglect

- Eyes closed: Unable to detect sensation to an arm?
- Eyes open: Is there a "forced" gaze? Or, eyes don't track your pen?

If "yes" to any of these, VAN is positive. Otherwise, the VAN scale is negative.

Stroke Protocol Reminders

- Time of signs/symptoms onset (*clock time*). Window is 6 hours.
 - Phone number of family member, if easily obtained.
- Cincinnati Stroke Scale:
 - If there's arm drift or weakness, perform the VAN scale.
- Notify the emergency department if Cincinnati scale is positive. Is VAN positive?
- Scene time: Less than 10 minutes (*document delays; perform interventions enroute*).

Enroute:

- Position head of stretcher to about 30 degrees.
- Vital signs with blood glucose measurement.
- Oxygen (*nasal cannula as a minimum*).
- Cardiac monitor with 12-lead ECG.
- IV with blood draw:
 - Large bore (*18 gauge, if possible*) to accommodate IV contrast
- Repeat stroke scale assessments if time allows. Advise ED of any changes.

Cincinnati Prehospital Stroke Scale (CPSS)			
Sign/Symptom	How tested	Normal	Abnormal
Facial Droop	Have the patient show their teeth or smile	Both sides of the face move equally	One side of the face does not move as well as the other
Arm Drift	The patient closes their eyes and extends both arms straight out for 10 seconds	Both arms move the same, or both do not move at all.	One arm either does not move, or one arm drifts downward compared to the other.
Speech	The patient repeats "The sky is blue in Cincinnati".	The patient says correct words with no slurring of words.	The patient slurs words, says the wrong words, or is unable to speak

Thrombolytic checklist			
Contact PDH regarding destination — PCI/Stroke center or PDH for Lytic treatment			
Any YES is potentially excluded from thrombolytics and possible candidate for direct transport to Thrombectomy / Stroke center			
		NO	YES
Vitals	Systolic greater than 180		
	Diastolic greater than 110		
	Heart Rate greater than 100 with BP less than 100 systolic		
History	Stroke in last 3 months		
	Significant closed head or face trauma in last 3 months		
	Any blood clotting issues		
	History of any intracranial hemorrhage		
	ANY Surgery in last 4 weeks (including eye)		
	Recent Major Trauma or GI Bleed		
Medications	ANY Blood thinners		
Current signs/Symptoms	Pulmonary Edema		
	Signs of Shock		
	Required CPR		