Large	c Health Administration Pre-hospital Services Committee c Conference Room Agenda	February 11, 2016 9:30 a.m.
	E. Gonzales, 2 <sup>nd</sup> Floor rd, CA 93036	
Oxila	Tu, CA 93036	
I.	Introductions	
II.	Approve Agenda	
III.	Minutes	
IV.	Medical Issues	
	A. Morphine IM Use	Dr. Salvucci
٧.	New Business	
	A. 705.08 - Cardiac Arrest – VF/VT	Dr. Salvucci
	B. 720 – Guidelines for Limited Base Contact	Dr. Salvucci
	C. 710 - Airway Management	Dr. Salvucci
	D. 726 – 12 Lead ECG	Chris Rosa
VI.	Old Business	
	A. 1130 – Continuing Education Provider Programs	Chris Rosa
VII.	Informational/Discussion Topics	
	A. EMT's – Epi-Pen, Narcan and Glucose Check	Dr. Salvucci
	B. Bariatric Patients	Dr. Salvucci
	C. 430 – STEMI Receiving Center (SRC) Standards	Dr. Salvucci
	D. CPAP (ref: 705.21, 705.22, 723)	Mark Komins
	E. Impedance Threshold Device (ITD) Removal	Dr. Salvucci
VIII.	Policies for Review	
	A. 708 - Patient Transfer From One Prehospital Team To Another	
IX.	Agency Reports	
1	A. Fire Departments	
	B. Ambulance Providers	
	C. Base Hospitals	
	D. Receiving Hospitals	
	E. Law Enforcement	
	F. ALS Education Program	
	G. TAG	
	H. EMS Agency	
	I. Other	
X.	Closing	

Health Administration Large Conference Room 2240 E. Gonzales, 2<sup>nd</sup> Floor Oxnard, CA 93036

### Pre-hospital Services Committee Minutes

December 10, 2015 8:30 a.m.

	Topic	Discussion	Action	Assigned
II.	Approve Agenda		Approved	Approved by Kathy McShea Seconded by Jeff Winter
III.	Minutes		Approved	Approved by Scott Zeller Seconded by Tom Gallegos
IV.	Medical Issues			
V.	New Business			
VI	Old Business			
	<ul><li>A. 450 – Acute Stroke Center (ASC) Standards</li></ul>		Approved with changes	Approved by Jennie Hoffman Seconded by Matt Beatty
	B. 604 – Transport and Destination Guidelines	Steve Frank is concerned that ambulances are being removed from their area because patients want to go to facilities outside their area. Dr. Larsen commented that he feels patients should go to the hospital they request within medical policy. Kathy McShea noted that this is more of an educational issue.	Page 4 – E - #3: Add "greater than 30 seconds" after "ROSC".	
	C. 704 – Guidelines for Base Hospital Contact	After a brief discussion. The committee agreed to change "8 year old" to "up to 24 months".	Approved with requested change.	Approved by Joe Dullam Seconded by Jeff Winter
	D. 726 – 12 Lead ECG		Approved with changes.	Approved by Don Hadland Seconded by Matt Beatty
VII.	Informational/Discussion Topics			
	A. PRESTO Observational Study Update		Tabled	
	B. air-Q Study Trial Update		Tabled	
	C. CAM/ART Certification Issues	Dr. Salvucci would like the CAM Committee to schedule a meeting to discuss airway issues.		

	D. Airway Video	Dr. Salvucci presented an airway video via Skype. The video showed how to correctly place various airways.	Dr. Larsen would like the field providers to demo the "I-gel", AMR said they could do that.	
	E. Anticoagulant List Update	A new medication has been added to the list: Ticlid/ticlopidine		
VIII.	Policies for Review			
	<ul><li>A. 605 – Interfacility</li><li>Transports of Patients</li></ul>		Tabled until March	
	B. 701 – Medical Control - PLP		Tabled until March	
	C. 1130 – Continuing Education Provider Approval	Class 1 –A, 1 – B and 1 – C needs to be done by a fire instructor. Replace "one year" with "current" in multiple locations.	Approved with changes.	Approved by Ira Tilles Seconded by Jeff Davies
	D. 1131 – Field Care Audit	Fix the formatting on page 1 and 2.	Approved	Approved by Jennie Hoffman Seconded by Matt Beatty
ΧI	TAG Report	No December Meeting		
X.	Agency Reports			
	A. Fire departments	VCFPD – Scott stated that they have rer have 6 extra doses of Egg Free Flu Vacc VCFD – none OFD – Brian Bryce is the new Fire Chief Fed. Fire – none SPFD – none FFD- none	cine.	
	B. Transport Providers	LMT –.none AMR/GCA – They have new FTO's. The training 10,000 members of the public in Paramedics.		
	C. Base Hospitals	SVH – none LRRMC – none SJRMC – none VCMC – Thank you to Lifeline for being VCMC. Dr. Duncan stated that they just "Trauma Book".	so flexible with the elevator issues at published the 3 <sup>rd</sup> addition of the	
	D. Receiving Hospitals	PVH - none SPH - none CMH - none OVCH - none		
	E. Law Enforcement	VCSO – none		

		CSUCI PD – none	
F.	ALS Education	Ventura College – James R. said that the Ventura College Paramedic Program	
	Programs	needs internships for 25 students. They are not above begging for assistance!!	
		Internships start in 3 months.	
G.	EMS Agency	Dr. Salvucci – none	
		Steve – none	
		Chris – none	
		Katy - none	
		Julie – none	
		Randy – none	
		Karen – none	
H.	Other		
XI.	Closing	Meeting adjourned at 1130	



# **TEMPORARY**PARKING PASS

Expires February 11, 2016

### Health Care Services 2240 E. Gonzales Rd Oxnard, CA 93036

For use in "Green Permit Parking" Areas only, **EXCLUDES** Patient parking areas

Parking Instructions: Parking at workshop venue is limited. Arrive early to allow for offsite parking if venue parking lot is full.

#### 2240 Gonzales Rd. location

If you park in a designated "green permit parking" slot, fold this flyer in half and place pass face-up on the dash of your car, to avoid receiving a ticket.

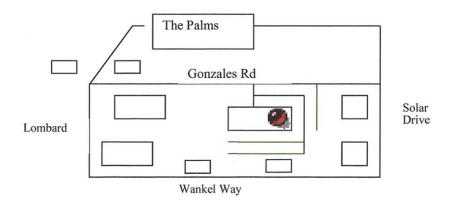
#### 2100 Solar Drive

An additional amount of "Green Permit Parking" spaces (only 30) are available in adjacent parking lot, those that back-up against venue parking area, (Enter this parking lot off of Gonzales[3rd driveway] or Solar Drive). Place this flyer on your dash. If all of those stalls are occupied, overflow parking is available at The Palms shopping area or side streets.

#### The Palms - shopping mall

Enter The Palms at Lombard and Gonzales. Allow for a ten minute walk to venue location.

Additional parking is available on side streets, Lombard, Solar and Wankel Way.



#### **ADULT PEDIATRIC BLS Procedures** Initiate Cardiac Arrest Management (CAM) Protocol Airway management per VCEMS policy ALS Prior to Base Hospital Contact Defibrillate – 2 Joules/kg Defibrillate If patient still in VF/VT at rhythm check, Use the biphasic energy settings that have been approved by service provider medical increase to 4 Joules/kg director Repeat every 2 minutes as indicated Repeat every 2 minutes as indicated IV or IO access IV or IO access PRESTO Blood Draw PRESTO Blood Draw Epinephrine 1:10,000 Epinephrine IV/IO - 0.01mg/kg (0.1 mL/kg) q 3-5 min IV/IO - 1:10,000: 1 mg (10 mL) q 3-5 min Amiodarone Amiodarone IV/IO - 5 mg/kg - after second defibrillation IV/IO - 300 mg - after second defibrillation If VT/VF-persists, 2.5 mg/kg IV/IO in 3-5 If VT/VF persists, 150 mg IV/IO in 3-5 minutes **ALS Airway Management** If unable to ventilate by BLS measures, initiate **ALS Airway Management** appropriate advanced airway procedures If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures If VF/VT stops, then recurs, perform defibrillation at the If VF/VT stops, then recurs, perform defibrillation at the last successful biphasic energy setting last successful biphasic energy setting Base Hospital Orders only Tricyclic Antidepressants Tricyclic Antidepressants Sodium Bicarbonate Sodium Bicarbonate IV/IO - 1 mEq/kg IV/IO – 1 mEq/kg Repeat 0.5 mEq/kg q 5 min Repeat 0.5 mEq/kg q 5 min Torsades de Pointes Magnesium Sulfate IV/IO - 2 gm over 2 min May repeat x 1 in 5 min Consult with ED Physician for further treatment measures Consult with ED Physician for further treatment measures ED Physician Order Only ED Physician Order Only History of Renal Failure/Dialysis **Calcium Chloride** 1. History of Renal Failure/Dialysis o IV/IO - 1g Calcium Chloride o Repeat x 1 in 10 min $\circ$ IV/IO – 20 mg/kg over 1 min Sodium Bicarbonate Repeat x 1 in 10 min IV/IO - 1 mEq/kg Sodium Bicarbonate • Repeat 0.5 mEq/kg q 5 min IV/IO - 1 mEq/kg Repeat 0.5 mEq/kg q 5 min Additional Information: \_lf sustained ROSC (>30 seconds), perform 12-lead EKG. Transport to SRC After 30 minutes of sustained VF/VT, make base contact for transport decision, If patient is <a href="https://example.com/hypothermic">hypothermic</a>—only ONE round of medication administration and limit defibrillation to 6 times prior to Base Hospital contact. Field determination of death is discouraged in these patients and they should be transported to the most accessible receiving facility Ventricular tachycardia (VT) is a rate > 150 bpm Date Revised: Jan 8, 2015 Effective Date: June 1 2015 Next Review Date: Jan 31, 2017 Last Reviewed: Jan 8, 2015 VCEMS Medical Director

Cardiac Arrest - VF/VT

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Deleted: <#>If patient converts to narrow complex rhythm greater than 50 bpm and not in 2<sup>nd</sup> or 3<sup>rd</sup> degree heart block, and amiodarone not already given, consider amiodarone 150 mg IVPB¶

 $\label{eq:Deleted: $$ $ Deleted: $$ $ Dem and not in $2^{nd}$ or $3^{nd}$ degree heart block, and amiodarone not already given, consider amiodarone 2.5 mg/kg IVPB¶$ 

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VCEMS Medical Director

COUNTY OF VENT	URA	EMER	GENCY MEDICAL SERVICES
HEALTH CARE AG	HEALTH CARE AGENCY DRAFT		OLICIES AND PROCEDURES
	Policy Title:		Policy Number
G	uidelines for Limited Base Contact		720
APPROVED			Date: Jun 1, 2013
Administrator:	Steven L. Carroll, EMT-P		Date. Juli 1, 2013
APPROVED			Date:June 1, 2013
Medical Director:	Angelo Salvucci, MD		Bate:04116 1; 2016
Origination Date:	June 15, 1998		
Date Revised:	April 9, 2013		Effective Date: June 1, 2013
Date Last Reviewed: Review Date:	February 14, 2013 January 31, 2015		Endeave Bate. Odno 1, 2010

- I. PURPOSE: To define patient conditions for which Paramedics shall make limited base contact (LBC).
- II. AUTHORITY: Health and Safety Code 1797.220.
- III. POLICY: Paramedics shall make LBC for uncomplicated cases, which respond positively to initial treatment and require no further intervention or where symptoms have resolved.

#### A. Patient criteria:

- 1. Hypoglycemia Blood Glucose < 60 mg/DL
- 2. Narcotic Overdose.
- Chest pain Acute Coronary Syndrome no arrhythmia, or associated shortness of breath
- 4. Shortness of Breath Wheezes/Other
- Seizure: No drug ingestion, no dysrhythmias, Chemstick > 60 (no longer seizing, not status epilepticus, not pregnant).
- 7. Syncope or near-syncope (stable vs. no dysrhythmia, Chemstick > 60.)
- 8. Pain (Except for head/neck/chest/abdominal and/or pelvic pain due to trauma)
- 9. Nausea and vomiting

#### B. Treatment to include:

- 1. Hypoglycemia: Prior to Contact procedure up to Dextrose
- 2. Narcotic Overdose: Prior to Contact procedure up to Naloxone
- 3. Chest Pain: Prior to Contact procedure up to three sublingual nitroglycerin or nitroglycerin spray (administered by paramedic) and Aspirin 324 mg po.
- 4. Shortness of Breath Wheezes/Other: Prior to Contact procedure up to one nebulized breathing treatment only (administered by paramedic).
- 5. Seizure: Prior to contact procedure up to administration of Dextrose and/or Versed.
- 6. Syncope or near-syncope: Prior to Contact procedure up to IV Chemstick check.
- 7. Pain: Prior to Contact procedure, including administration of Morphine.

\_\_\_\_\_

8. Nausea/Vomiting: Prior to Contact procedure, up to and including administration of Ondansetron.

#### C. Communication

- 1. The limited BH contact call-in shall include the following information:
  - a. ALS unit number
  - b. "We have a LBC"
  - c. Age/Sex
  - d. Brief nature of call
  - e. ETA and destination

#### D. Documentation

- 1. ALS Unit
  - a. Complete a VCePCR with "ALS (Limited Base Hospital Contact)" selected in the "Level of Service Provided" drop-down list.
- 2. MICN
  - a. Complete log entry with "LBC" noted in the treatment section.
  - b. Call will be documented on digital audio recording.

COUNTY OF VENTU	RA	EMERGENCY MEDICAL SERVICES
HEALTH CARE AGE	NCY DRAFT	POLICIES AND PROCEDURES
	Policy Title:	Policy Number
	Airway Management	710
APPROVED:		Datas Danashan 4 0044
Administration:	Steven L. Carroll, EMT-P	Date: December 1, 2014
APPROVED:		Date: December 1, 2014
Medical Director:	Angelo Salvucci, M.D.	Date: December 1, 2014
Origination Date:	June 1986	
Date Revised:	October 30, 2014	Effective Date: December 1, 201
Date Last Reviewed:	October 30, 2014	Effective Date: December 1, 201
Review Date:	October, 2016	

- I. PURPOSE: To define the indications, procedure and documentation for airway management by Ventura County EMS personnel.
- II. AUTHORITY: California Health and Safety Code, §1798, §1798.2; §1798.160 and §1798.170 and California Code of Regulations, Title 22, §100145 and §100146.
- III. Policy: Airway management shall be performed on all patients that are unable to maintain their own airway. Paramedics may utilize oral endotracheal intubation on patients eight (8) years of age or older, in accordance with Ventura County Policy 705.
- IV. Definitions: Attempt: An interruption of ventilation, with, 1) laryngoscope insertion for the purpose of inserting an endotracheal tube (ETT), or 2) lifting of tongue for the purpose of insertion of the air-Q.
- V. Procedure:
  - A. Bag-Valve-Mask (BVM) ventilations
    - 1. Indications
      - a. Respiratory arrest or severe respiratory compromise
      - b. Cardiac arrest according to VCEMS Policy 705
    - 2. Contraindications
      - a. None
    - 3. <u>Procedure</u>

      a. \_\_\_\_\_
      b. \_\_\_\_
      c. \_\_\_\_

**Deleted:** [OPTIONAL] Impedance Threshold Device (ITD, ResQPOD) – CARDIAC ARREST ONLY

Deleted: <#>MUST UTILIZE 2-RESCUER VENTILATION TECHNIQUE¶ For all rhythms, in patients 18 y/o and above, start continuous compressions at 100/min.

**Deleted:** Attach ResQPOD to BVM. As soon as BVM/ResQPOD is ready,

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Deleted: <#>shissert oral airway and perform CPR at
30:2 compression to ventilation ratio, utilizing the
BVM/ResQPOD to deliver the 2 breaths. ¶
Maintain a 2-handed face mask seal throughout
compressions.¶

If the patient has return of spontaneous circulation (ROSC),

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Deleted: immediately remove ResQPOD.

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 $\begin{tabular}{ll} \textbf{Deleted:} <\#> \textbf{Continue to assist ventilations at 1} \\ \textbf{breath every 5-6 seconds.} \P \end{tabular}$ 

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#### B. Air-Q

 Indications, Contraindications, Placement and Documentation in accordance with Policy 729.

#### C. Endotracheal Intubation (ETI)

- 1. Indications
  - Cardiac arrest according to VCEMS Policy 705 ONLY if unable to adequately ventilate with BVM or air-Q.
  - b. Respiratory arrest or severe respiratory compromise **AND** unable to adequately ventilate with BVM or air-Q.
  - After Base Hospital (BH) contact has been made, the BH
     Physician may order endotracheal intubation in other situations.

#### 2. Contraindications

- Traumatic brain injury unless unable to maintain adequate airway (e.g. – persistent vomiting).
- b. Intact gag reflex.
- 3. Intubation Attempts
  - a. There shall be no more than two (2) attempts to perform ETI, lasting no longer than 40 seconds each, and prior to BH contact. For patients in cardiac arrest, each ETI attempt shall interrupt chest compressions for no longer than 20 seconds.
  - b. The patient shall be ventilated with 100%  $O_2$  by BVM for one minute before each attempt.
  - If ETI cannot be accomplished in 2 attempts, the airway shall be managed by BLS techniques.
  - If ETI and BLS techniques are unsuccessful, the approved alternate ALS airway device may be inserted.

#### 4. Special considerations

- Flexible Stylet. A flexible stylet may be used for any ETI attempt that involves an ETT size of at least 6.0 mm.
  - Two Person Technique (recommended when visualization is less than ideal):
    - a) Visualize as well as possible.

Deleted: <#>[OPTIONAL] - ITD (ResQPOD) – CARDIAC ARREST ONLY¶ If/when advanced airway is established, transfer the ResQPOD to the advanced airway and start continuous compressions at 100/min with one breath

each 6 seconds (timing light) or every 10th compression¶
If patient has ROSC, immediately remove ResQPOD

If patient has ROSC, immediately remove ResQPOD from advanced airway and continue to assist ventilations at 1 breath every 5-6 seconds as needed.

- b) Place stylet just behind the epiglottis with the bent tip anterior and midline.
- Gently advance the tip through the cords maintaining anterior contact.
- d) Use stylet to feel for tracheal rings.
- e) Advance stylet past the black mark. A change in resistance indicates the stylet is at the carina.
- f) Withdraw the stylet to align the black mark with the teeth.
- g) Have your assistant load and advance the ETT tip to the black mark.
- h) Have your assistant grasp and hold steady the straight end of the stylet.
- i) While maintaining laryngoscope blade position, advance the ETT.
- At the glottic opening turn the ETT 90 degrees counter-clockwise to assist passage over the arytenoids.
- k) Advance the ETT to 22 cm at the teeth.
- I) While maintaining ETT position, withdraw the stylet.
- 2) One Person Technique (recommended when visualization is good but cords are too anterior to pass ET tube).
  - Load the stylet into the ETT with the bent end approximately 4 inches (10 cm) past the distal end of the ETT.
  - b) Pinch the ETT against the stylet.
  - With the bent tip anterior, while visualizing the cords advance the stylet through the cords.
  - d) Maintain laryngoscope blade position.
  - e) When the black mark is at the teeth ease your grip to allow the tube to slide over the stylet. If available have an assistant stabilize the stylet.

- At the glottic opening turn the ETT 90 degrees counter-clockwise to assist passage over the arytenoids.
- g) Advance the ETT to 22 cm at the teeth.
- h) While maintaining ETT position, withdraw the stylet.
- b. Tracheal stoma intubation
  - Select the largest endotracheal tube that will fit through the stoma without force (it should not be necessary to use lubricant).
  - 2) Do not use stylet.
  - 3) Pass ETT until the cuff is just past the stoma.
  - 4) Inflate cuff.
  - Attach the CO<sub>2</sub> measurement device to the ETT and confirm placement (as described below).
  - 6) Secure tube.
- 5. Confirmation of Placement It is the responsibility of the paramedic who has inserted the ETT to personally confirm (using air aspiration, auscultation, and CO<sub>2</sub> detection/measurement) and document proper placement. Responsibility for the position of the ETT shall remain with the intubating paramedic until a formal transfer of care has been made.
  - a. Prior to intubation, prepare both the air aspiration and the  $CO_2$  measurement devices.
  - b. Insert ETT, advance, and hold at the following depth:
    - 1) Less than 5 ft. tall: balloon 2 cm past the vocal cords.
    - 2) 5'-6'6" tall: 22 cm at the teeth.
    - Over 6'6" tall:24 cm at the teeth or 2 cm past the vocal cords.
  - c. After inserting the ETT, in the patient requiring CPR, resume chest compressions while confirming ETT placement.
  - d. Before inflating ETT balloon, perform the air aspiration technique.
    - Deflate the bulb, connect to the ETT, and observe for refilling.
    - 2) Refilling of the bulb in less than 5 seconds indicates tube placement in trachea.

- 3) If the bulb does not completely refill within 5 seconds, unless able to definitively confirm placement on repeat direct laryngoscopy, remove the ETT. Suspect delayed filling with the ETT in the trachea if the patient is morbidly obese, has fluid in the airway (pulmonary edema, aspiration, pneumonia, drowning), or the ETT is against the carina.
- e. Inflate the ETT cuff, attach the CO<sub>2</sub> measurement device, and begin ventilations. During the first 5-6 ventilations, auscultate both lung fields (in the axillae) and the epigastrium.
- f. After 6 ventilations, observe the CO<sub>2</sub> measurement device:
  - 1) If a colorimetric CO<sub>2</sub> detector device is used for initial placement confirmation prior to capnography, observe the color at the end of exhalation. Yellow indicates the presence of >5% exhaled CO<sub>2</sub> and tan 2-5% CO<sub>2</sub>. Yellow or tan indicates tube placement in the trachea. Purple indicates less than 2% CO<sub>2</sub> and in the patient with spontaneous circulation is a strong indicator of esophageal intubation.
  - When capnography is applied, a regular waveform with each ventilation should be seen with tracheal placement. If the patient has been in cardiac arrest for a prolonged time (more than 5-10 minutes) the waveform may be diminished or, rarely, absent. In the patient with spontaneous circulation, if a regular waveform with a CO<sub>2</sub> of 25 or higher is not seen, that is a strong indicator of esophageal intubation.
- g. Using information from auscultation and  $CO_2$  measurement, determine the ETT position.
  - If breath sounds are equal, there are no sounds at the epigastrium, and the CO<sub>2</sub> measurement device indicates tracheal placement, secure the ETT using an ETT holder.
  - 2) If auscultation or the  $CO_2$  measurement device, indicates that the ETT may be in the esophagus, immediately

- reevaluate the patient. If you are not CERTAIN that the ETT is in the trachea, the decision to remove the ETT should be based upon the patients overall clinical status (e.g., skin color, respirations, pulse oximetry)
- If breath sounds are present but unequal, the ETT position may be adjusted as needed.
- h. Once ETT position has been confirmed, reassessment, using CO<sub>2</sub> measurement, pulse oximetry (if able to obtain), and auscultation of breath sounds should be performed each time patient is moved.
- Continue to monitor the CO<sub>2</sub> measurement device during treatment and transportation. If a change occurs from positive (yellow/tan) to negative (purple), or the waveform diminishes or disappears, reassess the patient for possible accidental extubation or change in circulation status.
- j. After confirmation of proper ETT placement and prior to movement, all intubated patients shall have their head and neck maintained in a neutral position with head supports. A cervical collar will only be used if a cervical spine injury is suspected.
  - Reconfirm ETT placement after any manipulation of the head or neck, including positioning of a head support, and after each change in location of the patient.
  - Report to nurse and/or physician that the head support is for the purpose of securing the ETT and not for trauma (unless otherwise suspected).

#### 6. Documentation

- a. All ETI attempts must be documented in the "ALS Airway" section of the Ventura County Electronic Patient Care Report (VCePCR).
- b. All validated fields related to an advanced airway attempt shall be completed on the VCePCR. Anything related to the advanced airway attempt that does not have an applicable corresponding field in VCePCR, but needs to be documented, shall be entered into the report narrative. All data related to an advanced airway attempt (successful or not) shall be documented on a VCePCR. In addition, an electronic signature shall be captured on the mobile

device used to document the care provided. The treating emergency room physician will sign the 'Advanced Airway Verification' section of the VCePCR, as well as document the supporting information (placement, findings, method, comments, name, and date). In the event the patient was not transported, another on scene paramedic (if available) will sign and complete the verification section.

- c. Documentation of the intubation in the approved Ventura County Documentation System must include the following elements. The acronym for the required elements is "SADCASES."
  - 1) Size of the ETT
  - 2) Attempts, number
  - 3) Depth of the ETT at the patient's teeth
  - 4) Confirmation devices used and results. For capnography, recording of waveform at the following points:
    - a. Initial ETT placement confirmation;
    - b. Movement of patient; and
    - c. Transfer of care.
  - 5) Auscultation results
  - 6) Secured by what means
  - 7) ETCO2, initial value
  - 8) Support of the head or immobilization of the cervical spine.
- d. An electronic upload of Cardiac Monitor data, including ETCO2 waveform "snapshots" the the VCePCR is required. In the event an upload cannot occur, a printed code summary, mounted and labeled, displaying capnography waveform at the key points noted above is required. This printed code summary shall be scanned and attached to the VCePCR.

COUNTY OF VENTU	JRA		HEA	LTH CARE AGENCY
EMERGENCY MEDI	POI	POLICIES AND PROCEDURES		
	Policy Title			Policy Number:
	12 Lead ECG			726
APPROVED: Administration:	Steven L. Carroll, Paramedic		Date:	December 1, 2014
APPROVED: Medical Director:	Angeio Salvucci, MD		Date:	December 1, 2014
Origination Date:	August 10, 2006			
Date Revised:	October 9, 2014	Effective Da	to:	December 1, 2014
Date Last Reviewed:	October 9, 2014	Lifective Da	Effective Date. Decemb	
Review Date:	December, 2016			

- I. Purpose: To define the indications, procedure and documentation for obtaining 12-lead ECGs.
- II. Authority: California Health and Safety Code, Sections 1797.220 and 1798,California Code of Regulations, Title 22, Section 100175.
- III. Policy: Paramedics will obtain 12-lead ECGs in patients demonstrating symptoms of acute coronary syndrome. Treatment of these patients shall be done in accordance with this policy. Only paramedics who have received training in this policy are authorized to obtain a 12-lead ECG on patients. EMTs who are specially trained may be authorized to set up the 12 lead.

#### IV. Procedure:

- A. Indications for a 12-lead ECG: Medical history and/or presenting complaints consistent with an acute coronary syndrome. Patients will have the acute (within the previous 12 hours) onset of one or more of the following symptoms that have no other identifiable cause:
  - 1. Chest, upper back or upper abdominal discomfort.
  - 2. Generalized weakness.
  - 3. Dyspnea.
- B. Contraindications: Do NOT perform an ECG on these patients:
  - 1. Critical Trauma: There must be no delay in transport.
  - 2. Cardiac Arrest unless return of spontaneous circulation

#### C. ECG Procedure:

 Attempt to obtain an ECG during initial patient evaluation. Oxygen should be administered if patient is dyspneic, shows signs of heart failure or shock, or has SAO2 < 94% If the ECG can be completed without delay (less than 3 minutes after patient contact), and the patient is not in severe distress, perform ECG prior to medication administration.

- 2. The ECG should be done prior to transport.
- 3. If the ECG is of poor quality (artifact or wandering baseline), or the patient's condition worsens, may repeat to a total of 3.
- 4. Once an acceptable quality ECG is obtained, switch the monitor to the standard 3-lead function. Repeat the 12-lead ECG only if the original ECG interpretation is NOT \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*, and patient's condition worsens.
- 5. If interpretation is \*\*\*ACUTE MI SUSPECTED\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*, note underlying rhythm, and verify by history and physical exam that the patient does not have a pacemaker or ICD.
- D. Base Hospital Communication/Transportation:
  - 1. If the ECG interpretation is \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*; report that to MICN at the beginning of the report. If the ECG is of poor quality, or the underlying rhythm is paced, or atrial flutter, include that information in the initial report. All other information, except that listed in items 2, 4, and 5 below, is optional and can be given at the paramedic and MICN's discretion.
  - 2. Paramedics are to ask the patient if they have a cardiologist and report the information to the base hospital.
  - 3. If ECG Interpretation is \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*, patients should be transported to the closest and most appropriate STEMI Receiving Center (SRC) depending on patient preference and cardiac catheterization lab availability. MICN may direct ambulance to alternative SRC if cardiac catheterization lab not available.
  - 4. If the ECG interpretation is \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*, and the underlying rhythm is Atrial Flutter the Base Hospital shall be notified at the beginning of the report. The Cath Lab will not be activated.
  - 5. If the ECG interpretation is \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\* and the patient has a pacemaker or the ECG is of poor quality (wandering baseline and/or artifact) report that to the MICN.

- 6. If a first responder paramedic obtains an ECG that is **not** \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\* and the patient is stable, patient care may be turned over to the transporting paramedic. The ECG will be turned over to the transporting paramedic.
- 7. Positive ECGs will be handed to the receiving medical practitioner. The receiving practitioner will initial, time and date the ECG to indicate they have received and reviewed the ECG.

#### E. Patient Treatment:

1. Patient Communication: If the ECG interpretation is \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*, the patient should be told that "according to the ECG you may be having a heart attack". If the ECG interpretation is anything else, the patient should NOT be told the ECG is normal or "you are not having a heart attack". If the patient asks what the ECG shows, tell him/her that it will be read by the emergency physician.

#### F. Other ECGs

- If an ECG is obtained by a physician and the physician interpretation is
  Acute MI, the patient will be treated as an \*\*\*ACUTE MI
  SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI
  CRITERIA\*\*\*. Do not perform an additional ECG unless the ECG is of
  poor quality, or the patient's condition worsens.
- 2. If there is no interpretation of another ECG then repeat the ECG.
- 3. The original ECG performed by physician shall be obtained and accompany the patient.
- 12 Lead ECG will be scanned and added as an attachment to the Ventura County electronic Patient Care Report (VCePCR), in addition to being hand delivered to the receiving facility.

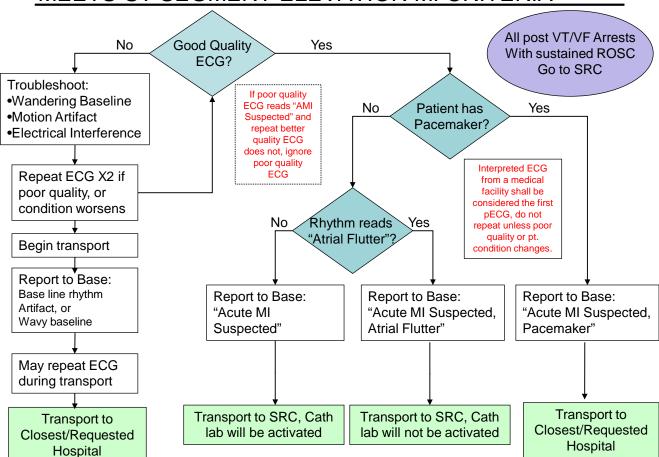
#### G. Documentation

 VCePCR will be completed per VCEMS policy 1000. The original ECG will be turned in to the base hospital and ALS Service Provider.

#### H. Reporting

 False Positive ECGs not recognized and called in as such to the Base Hospital, will be reported to VC EMS as an Unusual Occurrence in accordance with VC EMS Policy 150.

## \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*<u>MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*</u>



COUNTY OF VENTU	IRA	EMERG	SENCY MEDICAL SERVICES
HEALTH CARE AGE	NCY	PO	LICIES AND PROCEDURES
	Policy Title:		Policy Number
C	ontinuing Education Provider Approval		1130
APPROVED:	14/11		Data Docombor 1 2011
Administration:	Steven L. Carroll		Date December 1, 2011
APPROVED:			Date December 1, 2011
Medical Director:	Angelo Salvucci, M.D.		Date December 1, 2011
Origination Date:	February 2001		
Date Revised:	October 13, 2011	Effoo	tive Date: December 1, 2011
Date Last Reviewed:	October 13, 2011	Ellec	silve Date. December 1, 2011
Review Date:	December 1, 2014		

- PURPOSE: To identify the procedure for approval of Continuing Education Providers (CEP's) in Ventura County, both Advanced and Basic Life Support, in accordance with CCR, Title 22, Division 9, Chapter 11.
- II. AUTHORITY: California Code of Regulations, Title 22, Division 9, Chapter 11, Article 4.

#### III. POLICY:

- A. The Approving Authority for Prehospital Continuing Education Providers (CEP's) shall be the Ventura County Emergency Medical Services Agency.
- B. Programs eligible for approval shall be limited to public or private organizations that meet the requirements identified in this policy. All private entities must possess a valid business license and proof of organizational registry (partnership, sole proprietorship, corporation, etc).

#### IV. PROCEDURE:

- A. Program Approval
  - Eligible programs shall submit a written request for CEP approval to the EMS
     Agency and agree to provide at least 12 hours of continuing education per year.
  - 2. Applicant shall agree to participate in the VCEMS Quality Improvement Program and in research data accumulation.
  - Applicant shall agree to implement Year 2010 American Heart Association ECC and CPR Guidelines.
  - Applicant shall submit resumes for the Program Director and the Clinical Director.
  - Educational Staff Requirements:
     Nothing shall preclude one person from filling more than one position.
    - a. Program Director

- Shall be qualified by education and experience in methods, materials and evaluation of instruction which shall be documented by at least forty hours in teaching methodology. The following are examples of courses that meet the required instruction in teaching methodology:
  - a) California State Fire Marshal Fire Instructor 1A and 1B or
  - National Fire Academy "Fire Service Instructional Methodology" course or equivalent, or;
  - Training programs that meet the US DOT/National
     Highway Traffic Safety Administration 2002 Guidelines for
     Educating EMS Instructors such as the National
     Association of EMS Educators Course.
  - d) Individuals with equivalent experience may be provisionally approved for up to two years by the Agency pending completion of the above specified requirements.

#### b. Clinical Director

Must be either a physician, registered nurse, physician assistant, or paramedic currently licensed in California and shall have two years of academic, administrative or clinical experience in emergency medicine or prehospital care in the last five years.

#### c. CE Provider Instructors

- director and clinical director as qualified to teach the topics assigned, or have evidence of specialized training which may include, but is not limited to, a certificate of training or an advanced degree in a given subject area, or have at least one year of experience within the last two years in the specialized area in which they are teaching, or be knowledgeable, skillful and current in the subject matter of the course, class or activity.
- 6. Application Receipt Process

Upon receipt of a complete application packet, the Agency will notify the applicant within fourteen business days that;

- a. The request for approval has been received.
- b. The request does or does not contain all required information.
- c. What information, if any, is missing

#### 7. Program Approval Time Frames

- a. Program approval or disapproval shall be made in writing by the Agency to the requesting program, within sixty calendar days, after receipt of all required documentation.
- The Agency shall establish an effective date for program approval in writing upon the satisfactory documentation of compliance with all program requirements.
- c. Program approval shall be for four years following the effective date of the program and may be reviewed every four years subject to the procedure for program approval specified by the Agency.

#### 8. Withdrawal of Program Approval

- a. Noncompliance with any criterion required for program approval, use of any unqualified personnel, or noncompliance with any other applicable provision of Title 22 may result in suspension or revocation of program approval by the Agency.
- b. An approved program shall have no more than sixty days to comply with corrections mandated by this policy.

#### B. Program Review and Reporting

- 1. All program materials are subject to periodic review by the Agency.
- 2. All programs are subject to periodic on-site evaluation by the Agency.
- 3. The Agency shall be advised of any program changes in course content, hours of instruction, or instructional staff.
- 4. Records shall be maintained by the CEP for four years and shall contain the following:
  - a. Complete outlines for each course given, including brief overview, instructional objectives, outline, evaluations, and record of participant performance;
  - Record of time, place, and date each course is given and number of CE hours granted;
  - c. A curriculum vitae or resume for each instructor;
  - d. A roster of course participants (instructor based courses must have course participants sign roster)

- 5. Approved programs shall issue a tamper resistant Course Completion Certificate to each student who attends a continuing education course within 30 days of completion. This certificate shall include:
  - a. Student full legal name.
  - b. Certificate or license number
  - b. The date the course was completed
  - c. The name of the course completed
  - d. The name and signature of the Instructor or Program Director.
  - e. The name and address of the CE Provider.
  - f. Course completion document must contain the following statement with the appropriate information filled in. "This course has been approved for (number) of hours of continuing education by an approved California EMS CE Provider and was (check one) instructor based or non instructor based." It also must have your C.E. provider number on it.
  - g. The following statement in bold print:"This document must be maintained for no less than four years"
- 6. For the initial six months of CE program approval, the CE Provider shall submit a lecture approval form to the EMS Agency prior to offering a course. After the initial six month period, the CE Provider shall approve and maintain their own records subject to review by the EMS Agency.
- A Continuing Education Roster shall be completed for every course offered by the CEP. This roster shall be maintained by the CEP and subject to review by the Agency.
  - However, a copy of the Continuing Education roster for all required Ventura County CE programs (EMS Update, Skills testing, etc) shall be submitted to the Agency immediately after the completion of the program.
- Each CEP shall provide an annual report to the Agency, within 45 days of year end, detailing the names of the courses, times, number of hours awarded, and participants. A form will be provided by the EMS Agency.
- C. Application for Renewal
  - The CEP shall submit an application for renewal at least sixty calendar days before the expiration date of their CE provider approval in order to maintain continuous approval.
  - 2. All CE provider requirements shall be met and maintained for renewal as specified in VCEMS Policy 1130 and CCR, Title 22, Division 9, Chapter 11.

## **Ventura County Emergency Medical Services Agency Continuing Education Provider**

APPROVAL REQUEST	
General Information	
Program/Agency Name:	
Address: Cit	ty:Zip:
Phone: Fax: Er	mail:
Date Submitted: Status Requ	uested:   BLS   ALS
Requirements (All items below refer to Ventura County EMS Policy 1	130 and Title 22 Regulations)
1. Program Eligibility	Name of Program
Programs     Programs eligible for approval shall be limited to public or private organizations that meet the requirements identified in this policy. All private entities must possess a valid business license and proof of organizational registry (partnership, sole proprietorship, corporation, etc)	
Written request for CEP Approval	□ Attached
Submit resumes for Program Director and Clinical Coordinator	□ Attached
If you will be offering CPR, state what organization will provide certification (AHA or ARC)	□ AHA □ ARC
Our organization verifies that we have implemented the Year 2010 American Heart Association ECC and CPR Guidelines.	Signature:
2. Program Administration and Staff	
<ul> <li>Program Director</li> <li>Shall be qualified by education and experience in methods, materials and evaluation of instruction which shall be documented by at least forty hours in teaching methodology as described in Policy 1130, Section IV.A.5.a.1).</li> <li>Include current CV, resume, and copies of certifications/licensures.</li> </ul>	Name of Program Director:

Clinical Director		Name of Clinical Director:	
Two years experience in emergency medicine or			
prehospital care in the past five years.			
<ul> <li>Currently licensed CA MD, RN, PA, or paramedic.</li> </ul>			
<ul> <li>Include current CV, resume, and copies of certifications/licensures.</li> </ul>			
CE Provider Instructor(s)	Nam	ne(s) of CE Provider Instructor(s):	
<b>、</b> ,		,	
<ul> <li>Each CE provider instructor shall be approved by the program director and clinical director as qualified to teach the topics assigned, or have evidence of specialized training which may include, but is not limited to, a certificate of training or an advanced degree in a given subject area, or have at least one year of experience within the last two years in the specialized area in which they are teaching, or be knowledgeable, skillful and current in the subject matter of the course, class or activity.</li> </ul>			
3. CE Records and Quality Improvement		1	
Agree to maintain all continuing education records for a	٥.		
minimum of four years.	Sign	ature:	
A many to month in the MOTMO Quality learness and			
Agree to participate in the VCEMS Quality Improvement Program and in research data accumulation.	Sian	Signature:	
Program and in research data accumulation.	olgriature		
Course Completion Certificate/Record			
Provide a copy of the Course Completion Certificate/Record	<b>□</b> Δ.	ttached	
that will be issued upon completion of each session.	- /		
Course completion shall state whether the course was			
instructor or nor instructor based.			
VCEMS Office Use Only			
All Requirements Submitted:		Date:	
CEP Application Approved:		Date:	
OLI Application Approved.		Bate.	
Approval Letter Sent:		Date:	
Re-Approval Due:		Date:	
πο πρριοναί σας.		Date.	
Signature of person approving CEP		Date	
Signature of person approving CEP		Date	
Typed or printed name			

COUNTY OF VENTURA	EMERGENCY MEDICAL SERVICES
HEALTH CARE AGENCY	POLICIES AND PROCEDURES
Policy Ti	le: Policy Number
STEMI Receiving Cente	(SRC) Standards 430
APPROVED:	D-1 40/04/07
Administration: Steven L. Carroll,	EMT-P Date: 12/01/07
APPROVED:	Date: 42/0407
Medical Director: Angelo Salvucci, I	л.D. Date: 12/0107
Origination Date: July 28, 2006	
Date Revised:	Effective Deter
Last Review:	Effective Date:
Review Date:	

- I. PURPOSE: To define the criteria for designation as a STEMI Receiving Center in Ventura County.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2 and California Code of Regulations, Title 22, Section 100175.
- III. POLICY:
  - A. A STEMI Receiving Center (SRC), approved and designated by Ventura County EMS shall meet the following requirements:
    - 1. All the requirements of a Receiving Hospital in VCEMS Policy 420.
    - 2. All the requirements of a SRC in VCEMS Policy 440.
    - 2.3. Designate a SRC Coordinator who will have the responsibility for communication with VC EMS.
    - 3.4. Operate a cardiac catheterization lab licensed by the Department of Health Services and approved for emergency percutaneous coronary interventions.
    - 4.5. Maintain a daily roster of on-call cardiologists with privileges in percutaneous coronary interventions.
    - 6. Collect and submit data as identified by the STEMI QI Committee
    - 6. Licensed Cardiovascular Surgery.
    - 7. Have <u>criteria policies</u> for patients to receive emergent angiography or emergent fibrinolysis, based on physician decisions for individual patients.
    - 7.8. Maintain a hospital <u>STEMI</u> Quality Improvement Program.
    - 8.9. Actively participate in the Ventura County EMS STEMI Quality
      Improvement Program, and comply with data submission and case review standards as established by VCEMS.

- 9.10. Will accept all ambulance-transported patients with \*\*\*ACUTE MI SUSPECTED\*\*\* or \*\*\*MEETS ST SEGMENT ELEVATION MI CRITERIA\*\*\*, except on internal disaster or no cardiac catheterization lab is available, regardless of ICU/CCU or ED saturation status.
- 40.11. Have policies and procedures that allow the automatic acceptance of any STEMI patient from a Ventura County Hospital upon notification by the transferring physician.
- 12. Have available continuous Intra-aortic balloon pump and Impella device capability with staffing.
- 13. Have policies in place for the transfer of STEMI patients.

#### B. Designation

1. Application:

Eligible hospitals shall submit a written request for SRC approval to the VC EMS, documenting the compliance of the hospital with Ventura County SRC Standards.

- 2. Approval:
  - SRC approval or denial shall be made in writing by VCEMS to the requesting Hospital within two weeks after receipt of the request for approval and all required documentation.
- 3. VC EMS may deny, suspend, or revoke the approval of a SRC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
- 4. The VCEMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the PSC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
- 5. SRCs shall be reviewed on an annual basis.
  - a. SRCs shall receive notification of evaluation from the VCEMS.
  - b. SRCs shall respond in writing regarding program compliance.
  - c. On-site SRC visits for evaluative purposes may occur.
  - d. SRCs shall notify VCEMS by telephone, followed by a letter or email within 48 hours, of changes in program compliance or performance.

COUNTY OF VENTURA	
<b>EMERGENCY MEDICAL SERVIC</b>	ES

## STEMI RECEIVING CENTER CRITERIA COMPLIANCE CHECKLIST

SPC	Date:
<del></del>	- Date.

		YES	NO
An S	SRC, approved and designated by the Ventura County , shall:		
1.	Operate a cardiac catheterization lab licensed by the Department of Health Services and approved for emergency percutaneous		
	coronary interventions.		
2.	Maintain a daily roster of on-call cardiologists with privileges in percutaneous coronary interventions.		
3.	Have criteria for patients to receive emergent angiography or emergent fibrinolysis, based on physician decisions for individual patients.		
4.	Collect and submit data as required by VC EMS.		
<del>5.</del>	Maintain a quality improvement program		
6.	Designate a SRC Coordinator		
7.	Actively participate in the Ventura County EMS STEMI Quality Improvement Program.		
8.	Have policies and procedures that allow the automatic acceptance of all STEMI patients transferred from Ventura County hospitals.		

COUNTY OF VENTURA		EMERGENCY MEDICAL SERVICES		
HEALTH CARE AGENCY		POLICIES AND PROCEDURES		
	Policy Title:		Policy Number:	
Patient Transfer From One Prehospital Team To Another			708	
APPROVED: Administration:	Steven L. Carroll, EMT-P		Date: June 1, 2009	
APPROVED: Medical Director	Angelo Salvucci, MD		Date: June 1, 2009	
Origination Date: Date Revised: Date Last Reviewed: Review Date	October 31, 1992 December 11, 2008 December 11, 2008 June 30, 2012	Effe	ective Date: June 1, 2009	

- I. PURPOSE: To provide guidelines for transfer of patient care from one prehospital team to another prehospital team, if necessary.
- II. POLICY: Care of a patient may be transferred from one prehospital team to another according to the following procedures.

#### III. PROCEDURE:

#### A. Ground Unit to Ground Unit

- 1. ALS level response
  - a. Attempt to inform the Base Hospital (BH) and inform the patient of the necessity of a transfer.
  - b. Obtain agreement from the receiving team to accept responsibility for the patient.
  - c. Give a report concerning the patient's condition. This report should include history, physical assessment and all treatment rendered.
  - d. Document times and units involved on the Approved Ventura
     County Documentation System (AVCDS).
  - e. The receiving team is responsible for documentation.

#### 2. BLS level response

- a. Inform the patient of the necessity for a transfer.
- b. Obtain agreement from the receiving team to accept responsibility for the patient.
- c. Give a report concerning the patient's condition. This report should include history, physical assessment and all treatment rendered.

- d. Document times and units involved on the Approved Ventura
   County Documentation System (AVCDS).
- e. The receiving team is responsible for documentation.

#### B. Ground Unit to Air Unit

- 1. ALS capable personnel, if on scene, shall accompany a critical patient on the air unit.
- 2. Transfer from ground to air may be to a crew with lesser certificate level. If ALS procedures have been started (other than an IV in a stable patient), ALS personnel shall accompany the patient.
- If the ground crew is unable to make BH contact, the ALS personnel may operate under Communication Failure Protocols.
- C. Multi Casualty Incident (MCI) (Greater than 3 patients)
  - 1. Patients should be identified by START triage number, and this number shall be used during the remainder of the call.
  - 2. Care for a stable patient with a prophylactic IV (no meds) may be transferred to an EMT-I crew.