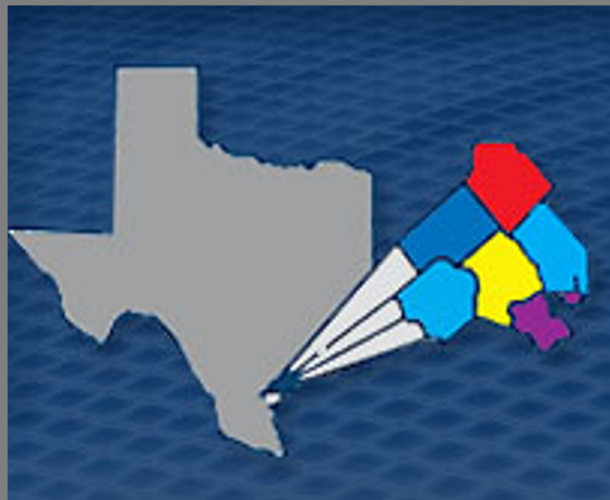


2023

# Golden Crescent Regional Advisory Council

*Trauma Service Area "S"*

## Trauma and Acute Care System Plan



**Golden Crescent Regional Advisory Council  
Trauma Service Area “S”  
Trauma and Acute Care System Plan**

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RAC Bylaws  
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## **Introduction**

### **Golden Crescent Regional Advisory Council System Plan**

For more than 20 years, the Trauma Service Area “S” and the Golden Crescent Regional Advisory Council (RAC) has been dedicated to the development and implementation of an organized trauma system in the Golden Crescent region of Texas. The trauma system plan has now evolved to include Acute Care aspects and Disaster planning.

The Golden Crescent RAC system plan is intended to be useful document that meets the real-time needs of the RAC member stakeholders and associates. Contact information and resources will be available via the Golden Crescent RAC website ([www.gcrac.org](http://www.gcrac.org)) with the intent that they be available at all times and can be updated as necessary.

The plan is an ongoing work in progress and will change and evolve as our system develops and evolves. Input from RAC members and associates is always welcome. The overall goal is the make the plan a resource that serves the needs of the users.

## **General Overview and Mission Statement**

### **Overview of Golden Crescent RAC-S**

The Golden Crescent Regional Advisory Council, Trauma Service Area “S” serves a six county area to include: Calhoun County, DeWitt County, Goliad County, Jackson County, Lavaca County, and Victoria County. Current referral patterns also include patients from Gonzales County, Karnes County, Refugio County, Bee County, Matagorda County, Aransas County, Fayette County, and Wharton County. The population of the area is approximately 175,938 covering 5517 square miles. The Golden Crescent RAC has eight trauma-designated hospital participants and approximately 20 fire-based, volunteer, first responder, or private EMS providers. There is also participation from several major area plants and manufacturers and faculty from the Victoria College.

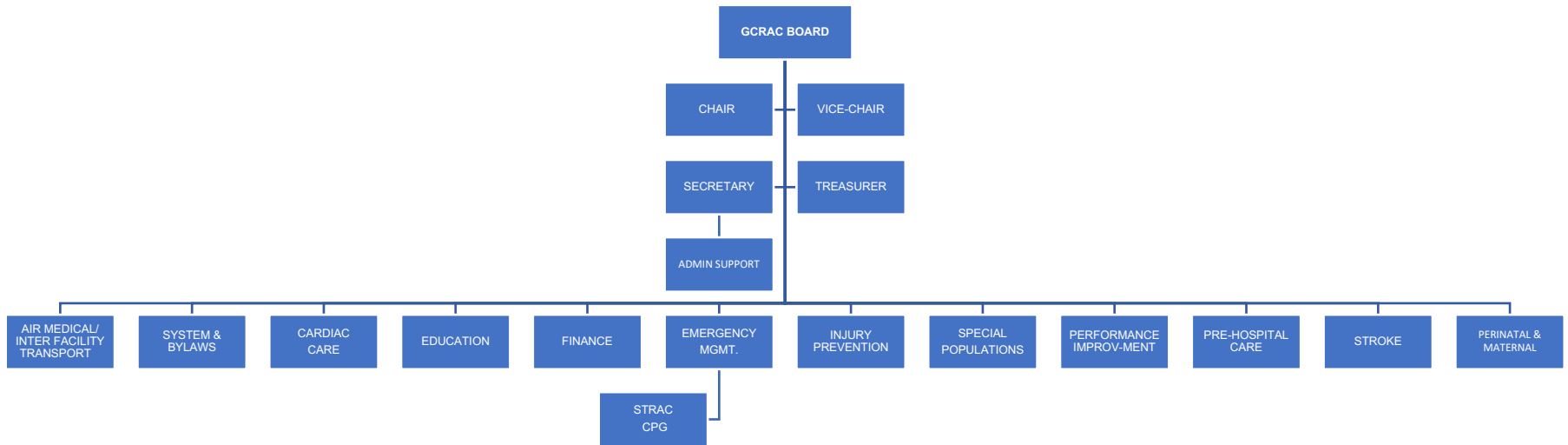
The focus of the GCRAC began with Trauma Systems; however, with the development and strengthening of the “systems of care” concept in Texas, the scope of the GCRAC has broadened to include Cardiac, Stroke, Pediatric and Special Populations issues, Perinatal/Maternal Health, and Emergency Management.

The GCRAC Trauma and Acute Care System Plan shall be reviewed annually by the Golden Crescent RAC. Changes may be made at any time with the approval of the RAC membership.

### **GCRAC Mission Statement**

*The mission of the Golden Crescent Regional Advisory Council is to facilitate the development, implementation, and operation of a comprehensive regional trauma, emergency, and acute care system based on accepted standards of care in a collaborative effort to decrease morbidity and mortality.*

# GCRAC Organization



## Golden Crescent RAC Officers and Committee Chairs

### GCRAC Officers:

<p><b>Chairman:</b>          Carolyn Knox, RN, LP          Citizens Medical Center          2701 Hospital Dr.          Victoria, TX 77901          (O) 361-572-5128          (F) 361-582-5795  <a href="mailto:carolynk@cmcvtx.org">carolynk@cmcvtx.org</a></p>	<p><b>Vice Chairman:</b>          Melinda Fox, RN, BSN          Citizens Medical Center          2701 Hospital Dr.          Victoria, TX 77901          (O) 361-574-1595          (F) 361-572-5070  <a href="mailto:mfox@cmcvtx.org">mfox@cmcvtx.org</a></p>
<p><b>Secretary:</b>          Sarah Rubio, RN, BSN          Memorial Medical Center          815 N. Virginia Street          Port Lavaca, TX 77979          (O) 361-788-6328  <a href="mailto:sarubio@mmcportlavaca.com">sarubio@mmcportlavaca.com</a></p>	<p><b>Treasurer:</b>          Robert T. Fox, Fire Chief          Victoria Fire Department          1703 E. Airline          Victoria, TX 77901          (O) 361-485-3450  <a href="mailto:robert.fox@victoriatx.org">robert.fox@victoriatx.org</a></p>

### GCRAC Executive Director:

<p>Kyle Jacobson          2701 Hospital Dr.          Victoria, TX 77901          (O)210-542-6378  <a href="mailto:kyle.jacobson@gcrac.org">kyle.jacobson@gcrac.org</a></p>
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### GCRAC Committee Chairs:

Executive	<p>Carolyn Knox, RN, LP          Citizens Medical Center          2701 Hospital Dr.          Victoria, TX 77901          (O) 361-572-5128          (F) 361-582-5795  <a href="mailto:carolynk@cmcvtx.org">carolynk@cmcvtx.org</a></p>
Pre-Hospital Care & Transportation	<p>James Sudik, LP          Jackson County Hospital District EMS          1013 South Wells Street          Edna, TX 77957          (O) 361-782-7800          (F) 361-782-7495  <a href="mailto:jsudik@jchd.org">jsudik@jchd.org</a></p>
Coalition Planning Group	<p>Kyle Jacobson          Southwest Texas Regional Advisory Council          7500 US Hwy 90 W, AT&amp;T Bldg. Suite 200          San Antonio, TX 78227          (O)210-542-6378  <a href="mailto:kyle.jacobson@strac.org">kyle.jacobson@strac.org</a></p>

Education	Susie Jechow, LP Victoria College 2200 E. Red River Victoria, TX 77901 (O) 361-572-6447 <a href="mailto:susie.jechow@victoriacollege.edu">susie.jechow@victoriacollege.edu</a>
Finance	Freddie Solis, LP Cuero EMS 2550 N. Esplanade Cuero, TX 77954 (O) 361-275-0521 (F) 361-275-3999 <a href="mailto:freddies@cuerohospital.org">freddies@cuerohospital.org</a>
Performance Improvement	Andrea Page, BSN, RN Jackson County Hospital 1013 South Wells Street Edna, Texas 77957 (C) 361-649-7178 <a href="mailto:apage@jchd.org">apage@jchd.org</a>
Bylaws & Mentorship	Judy Mazak, BSN, RN, CEN Cuero Regional Hospital 2550 N. Esplanade Cuero, TX 77954 (O) 361-275-6191 Ext. 2422 (F) 361-275-0540 <a href="mailto:jmazak@cuerohospital.org">jmazak@cuerohospital.org</a>
Air Medical & Inter-Facility Transport	Jeremy Thomasson PHI Air Medical 2701 Hospital Dr. Victoria, TX 77901 (O) 361-582-0988 <a href="mailto:jthomasson@phihelico.com">jthomasson@phihelico.com</a>
Special Populations	Clayton Ley, RN DeTar Healthcare System, DeTar Hospital Navarro 506 E. San Antonio St. Victoria, TX 77901 (O) 361-788-4679 (F) 361-788-6682 <a href="mailto:clayton.ley@detar.com">clayton.ley@detar.com</a>
Stroke	Cristy Autry, RN Citizens Medical Center 2701 Hospital Dr. Victoria, TX 77901 (O) 361-573-9181, ext. 5654 <a href="mailto:cautry@cmcvtx.org">cautry@cmcvtx.org</a>
Cardiac Care	Krysta Zavesky, RN Citizens Medical Center 2701 Hospital Dr. Victoria, TX 77901 (O) 361-573-9191, ext. 1038 <a href="mailto:kzavesky@cmcvtx.org">kzavesky@cmcvtx.org</a>
Medical Directors	John McNeill, DO Victoria Primary Care Associates 2501 N. Navarro St.



	Victoria, TX 77901 (O) 361-573-4100
Injury Prevention	Holly Smith, LVN DeTar Healthcare System DeTar Hospital Navarro 506 E. San Antonio St. Victoria, TX 77901 (O) 361-788-6685 (F) 361-788-6684 <a href="mailto:holly.smith@detar.com">holly.smith@detar.com</a>
Perinatal Health	Dawn Jimenez, RN DeTar Healthcare System DeTar Hospital North 101 Medical Dr. Victoria, TX 77904 (O) 361-788-2603 <a href="mailto:dawn.jimenez@detar.com">dawn.jimenez@detar.com</a>

## GCRAC Membership Roster by Member County and Partner Entities

<b>GCRAC Membership Roster by Member County</b>					
<b>Calhoun County</b>	<b>DeWitt County</b>	<b>Jackson County</b>	<b>Lavaca County</b>	<b>Goliad County</b>	<b>Victoria County</b>
<b>Memorial Medical Center</b>	<b>Cuero Regional Hospital</b>	<b>Jackson County Hospital</b>	<b>Lavaca Medical Center</b>	Goliad Co. EMS	<b>Citizens Medical Center</b>
Calhoun County EMS	Cuero EMS	Jackson County Hospital District EMS	<b>Yoakum Community Hospital</b>		<b>DeTar Hospital Navarro</b>
Magnolia Beach VFD	Yorktown EMS		Lavaca County Rescue		<b>DeTar Hospital North</b>
Point Comfort First Responder			Yoakum Fire/EMS		Victoria Fire Department
Port Alto/Port Olivia VFD			Akin Ambulance		Victoria County First Responders
Port O'Connor EMS					Fordtran EMS
Seadrift EMS					Telferner VFD
					Lone Tree FRO
					Inez FRO
					Mission Valley FRO
					Quail Creek FRO
					Raisin FRO
					Sacred Heart EMS
					PHI Air Medical
					Prestige Ambulance
					City Ambulance

<b>GCRAC Partner Entities</b>	
ALCOA	Golden Crescent Healthcare Coalition
BP Chemical	Refugio County Memorial Hospital
Formosa Plastics	Refugio EMS
Inteplast	Texas Department of State Health Services
DOW	Texas Department of Transportation
INEOS Nitriles	Victoria College EMS Program
Invista	STRAC

## **GCRAC Membership and Participation Requirements**

The Golden Crescent Regional Advisory Council has defined requirements for membership and participation requirements for eligibility for funds distributed by the RAC. (See Bylaws for the Golden Crescent Regional Advisory Council, Texas Trauma Service Area S, Article III. Membership.)

### **Regional Communications**

#### **Access to Care in the Golden Crescent**

All counties in Golden Crescent RAC, TSA-S, are equipped with Enhanced 9-1-1 (E9-1-1). E9-1-1 is a system that automatically routes emergency calls to a pre-selected answering point based upon the service delivery area of the EMS provider. This is provided by a service known as Selective Routing (SR). With SR, 9-1-1 calls are routed to a designated Public Safety Answering Point (PSAP). The PSAP then dispatches or transfers the call to the proper EMS provider.

When a caller dials 9-1-1, the caller's name, address, telephone number and Public Safety Provider (police, fire, EMS) are displayed on the screen at the PSAP. The display of the telephone number is referred to as Automatic Location Identification (ALI). All PSAP's in the Golden Crescent are equipped with ANI, ALI, and SR. All PSAP's have some level of emergency medical dispatch training.

In circumstances when all incoming 9-1-1 lines are busy or the central system is down for a period of time, the calls are automatically routed to a designated alternate location.

In TSA-S, all pay phones offer free 9-1-1 access as well as operator assistance. Phone lines in residences and business alike, that are not connected, have 9-1-1 access. Mobile phone customers also have no charge 9-1-1 access. For the public that is hearing impaired, the TDD system is linked to 9-1-1 and the TDD payphones offer free access.

## PSAP Locations in TSA-S

<b>Calhoun County (2) 911 Positions</b>	
Calhoun County Sheriff's Office 211 S. Ann Port Lavaca, Texas 77979 (361) 553-4646	Calhoun County EMS Six Mile First Responder Port O'Connor VFD/EMS Olivia/Port Alto VFD/EMS Seadrift First Responders Point Comfort First Responders Magnolia Beach First Responders
<b>DeWitt County (2) 911 Positions</b>	
DeWitt County Sheriff's Office 203 E. Live Oak Cuero, Texas 77954 (361) 275-5734	Cuero EMS Yorktown EMS
<b>Goliad County (2) 911 Positions</b>	
Goliad County Sheriff's Office 700 E. End Street Goliad, Texas 77963 (361) 645-3451	Goliad EMS
<b>Jackson County (2) 911 Positions</b>	
Jackson County Sheriff's Office 115 W. Main Edna, Texas 77957 (361) 782-3541	Edna EMS Vanderbilt EMS Jackson County Hospital District
<b>Lavaca County (2) 911 Positions</b>	
Lavaca County Sheriff's Office 305 N. Main Hallettsville, Texas 77964 (361) 798-2121	Lavaca County Rescue Service
<b>Victoria County (8) 911 Positions</b>	
Victoria Police Department [(5) 911 Positions] 306 S. Bridge Victoria, Texas 77901  Victoria County Sheriff's Department [(3) 911 Positions] 101 N Glass Victoria, Texas 77901 (361) 575-0651	Victoria Fire/EMS Raisin EMS Telferner EMS
<b>Yoakum (2) 911 Positions</b>	
City of Yoakum Police Department 900 Irvine Yoakum, Texas 77995 (361) 293-5234	Yoakum EMS

## GCRAC Satellite Phone Numbers

<b>TSA-S Satellite Phone Numbers</b>		
<b>Facility</b>	<b>Sat Phone Number</b>	<b>Unit ID</b>
Citizens Medical Center	888-326-6369	0538
Cuero Regional Hospital	800-725-4751	1534
DeTar Navarro	800-697-9195	0888
DeTar North	877-457-5399	0150
Goliad EMS	888-824-4919	2253
Golden Crescent MOC	877-220-1307	0177
Jackson County Hospital	800-666-2986	1552
Lavaca Medical Center	800-700-7514	1547
Memorial Medical Center	877-592-7266	1012
Post-Acute Medical North	800-731-3345	1535
Yoakum Community Hospital	800-690-9091	0592
Calhoun County EOC	500-180-3608	0083
Calhoun County SO	500-180-3646	0366
Dewitt County EOC	500-180-3751	0372
Dewitt County SO	500-180-3718	0371
DSHS Region 8 Office		9715
Goliad County SO	500-180-3648	0367
Gonzales County SO	500-180-4343	0373
Jackson County EOC	500-180-4348	0375
Jackson County SO	500-180-4554	0377
Lavaca County EOC	500-180-4597	0233
Lavaca County SO	500-180-4597	0378
City of Victoria PD	500-180-4631	0379
City of Yoakum PD	500-180-3652	0370

**GCRAC Radio Frequencies and Phone numbers  
CALHOUN COUNTY**

<b>AGENCY</b>	<b>Channel Designation</b>	<b>Frequency Receive</b>	<b>Frequency Transmit</b>	<b>PL Decode</b>	<b>PL Incode</b>
Calhoun County EMS	Calhoun EMS	153.815	155.085	91.5	91.5
	Cal-EMS T/A	153.815	153.815	91.5	91.5
Port O'Connor EMS	Calhoun EMS	153.815	155.085	91.5	91.5
	Cal-EMS T/A	153.815	153.815	91.5	91.5
Seadrift EMS	Calhoun EMS	153.815	155.085	91.5	91.5
	Cal-EMS T/A	153.815	153.815	91.5	91.5
Port Alto EMS	Calhoun EMS	153.815	155.085	91.5	91.5
	Cal-EMS T/A	153.815	153.815	91.5	91.5
Magnolia Beach First Responder	Calhoun EMS	153.815	155.085	91.5	91.5
	Cal-EMS T/A	153.815	153.815	91.5	91.5
<b>HOSPITAL</b>	<b>EMS Phone</b>	<b>12 Lead Line #</b>	<b>E.R. Phone</b>	<b>Main Line</b>	<b>FAX Line</b>
Memorial Medical Center		361-552-6584	361-552-0270	361-552-6713	361-552-0338
<i>Med channel-7</i>					

**DEWITT COUNTY**

<b>AGENCY</b>	<b>Channel Designation</b>	<b>Frequency Receive</b>	<b>Frequency Transmit</b>	<b>PL Decode</b>	<b>PL Incode</b>
Cuero EMS	Cuero EMS	153.340	158.940	107.2	107.2
Yoakum EMS	Yoakum EMS	154.400	150.805	107.2	107.2
Yorktown EMS	Yorktown EMS	154.725	155.520	107.2	107.2
<b>HOSPITAL</b>	<b>EMS Phone</b>	<b>12 Lead Line #</b>	<b>E.R. Phone</b>	<b>Main Line</b>	<b>FAX Line</b>
Cuero Regional Hospital	361-275-0536		361-275-0535	361-275-6191	361-275-3999
<i>Med channel-9</i>					
Yoakum Community Hospital	361-293-5419		Ext: 380	361-293-2321	361-293-5748

<b>GOLIAD COUNTY</b>					
<b>AGENCY</b>	<b>Channel Designation</b>	<b>Frequency Receive</b>	<b>Frequency Transmit</b>	<b>PL Decode</b>	<b>PL Incode</b>
Goliad EMS	Goliad D. O.	154.415	154.13	107.2	107.2

<b>JACKSON COUNTY</b>					
<b>AGENCY</b>	<b>Channel Designation</b>	<b>Frequency Receive</b>	<b>Frequency Transmit</b>	<b>PL Decode</b>	<b>PL Incode</b>
Edna EMS	Dispatch	153.770	155.445	123.0	123.0
Jackson County Hospital District EMS	Dispatch	153.770	154.445	123.0	123.0
Vanderbilt EMS	Dispatch	153.770	154.445	123.0	123.0
All Agencies	Scene	154.280	154.280	107.2	107.2
<b>HOSPITAL</b>	<b>EMS Phone</b>	<b>12 Lead Line #</b>	<b>E.R. Phone</b>	<b>Main Line</b>	<b>FAX Line</b>
Jackson County Hospital				361-782-5241	

<b>LAVACA COUNTY</b>					
<b>AGENCY</b>	<b>Channel Designation</b>	<b>Frequency Receive</b>	<b>Frequency Transmit</b>	<b>PL Decode</b>	<b>PL Incode</b>
<b>HOSPITAL</b>	<b>EMS Phone</b>	<b>12 Lead Line #</b>	<b>E.R. Phone</b>	<b>Main Line</b>	<b>FAX Line</b>
Lavaca Medical Center			361-798-9951	361-798-3671	361-798-9951

<b>VICTORIA COUNTY</b>					
<b>AGENCY</b>	<b>Channel Designation</b>	<b>Frequency Receive</b>	<b>Frequency Transmit</b>	<b>PL Decode</b>	<b>PL Incode</b>
Victoria Fire/EMS	VIC-FIRE CH-2	155.115	155.715	107.2	107.2
	VICFIRECH2TA	155.115	155.115	107.2	107.2
	VIC-FIRE CH-1	154.430	153.950	107.2	107.2
	VIC-FIRE CH-8	154.220	154.220	107.2	107.2
	VIC-FIRE ADM	154.145	154.145	107.2	107.2
<b>HOSPITAL</b>	<b>EMS Phone</b>	<b>12 Lead Line #</b>	<b>E.R. Phone</b>	<b>Main Line</b>	<b>FAX Line</b>
Citizens Medical Center	361-572-5099		361-572-6311	361-573-9181	361-572-5090
<i>med channel-1</i>					
DeTar Hospital Navarro	361-788-6002	361-788-6984	361-788-6680	361-575-7441	361-788-6682
<i>med channel-2</i> 866.0125					
DeTar Hospital North			361-788-2534	361-573-6100	361-788-2685
<i>Med channel-3</i>					



## Hospital System Access

### Definitions

**Transfer:** Movement of patient from one hospital to another hospital based on patient need and hospital capability.

**Bypass:** Intentional movement of a patient from the scene to the most appropriate hospital, not necessarily the nearest hospital, based upon the patient's medical need and the hospital's capability.

**Diversion:** Intentional movement of a patient from the scene to an alternate hospital capable of providing appropriate care at the request of the diverting hospital due to the temporary lack of resources or capability.

**Appropriate Facility:** A hospital, not necessarily the nearest hospital, with the resources and capability to care for a patient based upon the patient's medical needs.

## **Hospital Diversion Requests**

TSA-S hospital facilities should request EMS diversion only when the capability and/or capacity of that facility have been exhausted to the point that further EMS traffic would jeopardize the care and treatment of patients at that facility as well as any subsequent patients transported to that facility by EMS.

It is acknowledged that no diversion request can be guaranteed. It is further understood that *patient's informed wishes will be honored regardless of diversion request.*

EMS may over-ride a diversion request after consideration of the following:

- The patient's clinical presentation
- Distance and estimated time to an alternate appropriate facility
- Inclement weather conditions
- Resources availability and capability of the transporting pre-hospital provider
- Informed patient preference

To facilitate communication between hospitals and EMS services in Trauma Service Area "S," hospitals diversion requests can be indicated on WebEOC.

## EMS Bypass Plan

Patient care circumstances may indicate the need to bypass the nearest hospital in order to manage the needs of the patient based on the presenting assessment. The decision to bypass the closest hospital rests with the EMS system providers. Situations requiring facility bypass may include, but are not limited to:

- 1.) Level I trauma care
- 2.) STEMI PCI care
- 3.) Stroke Care
- 4.) Specialized services

EMS Providers may decide to transport to the nearest appropriate facility for the following situations:

- 1.) The patient is critical and unable to tolerate transport to a more distant comprehensive medical facility
- 2.) The patient refuses transport to another medical facility
- 3.) OB emergencies

## Bypass Decision Criteria

### Nearest Hospital/Handoff:

The major trauma patient will be transported to the nearest hospital under the following conditions:

- Unable to establish/maintain an adequate airway
- Patient is in traumatic cardiac arrest
- It is expected that the transport time to the most appropriate facility exceeds 60 minutes and EMS is unable to arrange air-medical transport and/or handoff to an EMS service with ALS capability.

### Trauma Bypass Criteria:

EMS Providers in areas with Level IV trauma centers should consider a bypass to a Level III or higher trauma center in the following circumstances:

- $GCS \leq 13$
- $RTS < 11$
- Systolic BP  $\leq 90$ mmHg
- Sustained Heart Rate  $\geq 120$ /bpm
- Respiratory rate  $< 10$  or  $> 29$
- Children  $< 5$  years with SBP  $< 60$  or HR  $> 180$
- Children  $> 5$  years with SBP less than  $(70+2x \text{ age})$  or HR  $> 160$
- Penetrating injury to the neck, head, chest, abdomen, back
- Flail chest (chest wall integrity compromise)
- Burns – 2<sup>nd</sup> or 3<sup>rd</sup> Degree burns  $> 10\%$  TBSA in patients  $< 10$  or  $> 50$ y/o

2<sup>nd</sup> or 3<sup>rd</sup> Degree burns > 20% TBSA in all other age groups

- Two or more proximal long bone fractures (humerus, femur)
- Open or depressed skull fracture
- Traumatic Paralysis
- Amputation or near amputation proximal to wrist or ankle
- Extremity Injury with absent palpable pulses

### **Stroke Bypass Criteria:**

EMS Providers in areas with Level III Support Stroke Facilities should consider bypass to a Primary or higher stroke facility in the following circumstances:

1. If the patient is in the window to receive I.V. thrombolytics, AND the local hospital DOES NOT have capacity or capability to provide this treatment within 60 minutes of the patient's arrival at the receiving facility. The window is defined by current standards of care at 3 to 4.5 hours from onset of symptoms.
2. If the local hospital does not have the capability to complete diagnostic testing within the timeframes defined by the Brain Attack Coalition and American Heart Association Stroke Guidelines.
3. If the local hospital does not provide t-PA for qualified patients having acute ischemic strokes.

All Hospitals will attempt to keep Pre-Hospital Providers aware of receiving status for Stroke Patients to include CT availability.

### **STEMI Bypass Criteria:**

EMS Providers in areas without Percutaneous Coronary Intervention (PCI) capability should consider bypass to a PCI center when the patient has an identified ST-elevation on pre-hospital 12-lead ECG and is hemodynamically stable enough for transport to the PCI center. The EMS agency should transmit a **STEMI Alert** along with the 12-lead ECG to the PCI center as soon as possible during transport. *EMS Providers should refer to the GCRAC STEMI Bypass Protocol for incidents involving potential STEMI Patients.*

Subject/Protocol:	STEMI/Cardiac Bypass	
Last Revision: January 2017		Protocol No: A-1 (B)

**The term “Bypass” is used to describe the process by which regional EMS providers have the ability to transport a patient directly from the scene to a primary Percutaneous Coronary Intervention (PCI) capable hospital rather than a local non-PCI hospital. EMS will recommend to patients meeting STEMI criteria that a PCI-Capable facility is preferable. If the patient chooses not to go to a PCI facility, the patient should be made aware that the referral facility may transfer them to a receiving PCI facility at a later time for treatment and the risks associated with that delay.**

**Indications for Application:**

- Patient who is experiencing chest pain or discomfort **OR** experiencing symptoms consistent with typical angina / infarct events.
- **Conditions**
  - ◆ Patient is alert and > 16 years of age.
  - ◆ Current episode of cardiac symptoms > 15 minutes and < 12 hours in duration.
  - ◆ Paramedic interpretation of the 12 lead ECG identifies STEMI (ST segment elevation > 1 millimeter in two or more anatomically contiguous leads).
  - ◆ Time from patient contact to arrival at PCI hospital will be < 90 minutes. (Consider transport to PCI facility even if time frame exceeds 90 minutes.)

**Contraindications:**

- Patients meeting the following criteria may require transport to the closest appropriate hospital:
  - ◆ Hemodynamically unstable patient
  - ◆ Heart rate < 60 or > 160 beats per minute
  - ◆ Systolic blood pressure < 90 mmHg
  - ◆ Severe respiratory distress

**Guidelines and Standing Orders:**

- **12 Lead ECG Rapid Assessment**
  - ◆ Acquire 12 lead ECG within 5 minutes of arrival at patient's side.
  - ◆ Identify ST segment elevation of one millimeter or more (one small box) present in anatomically contiguous leads.
  - ◆ anatomically contiguous leads are:
    - (1) Inferior leads (II, III and aVF)
    - (2) Septal leads (V1 and V2)
    - (3) Anterior leads (V3 and V4)
    - (4) Lateral leads ("high lateral" I, aVL, "low lateral" V5 and V6)

***In addition, any two precordial leads that are next to one another are contiguous. Also remember that a normal 12 lead does not rule out an AMI.***

- **Treatment and Transport**

- ◆ Follow "General Guidelines and Standing Orders" of the local EMS provider's General Cardiac Care (Suspected MI) protocol.
- ◆ Communicate a STEMI Alert to receiving PCI hospital.
- ◆ Transmit 12 lead ECG to the appropriate PCI hospital as soon as it is obtained and destination is determined.
- ◆ Provide a patient report to the destination hospital.
- ◆ Scene time should not exceed 15 minutes. Rapid transport is essential. Ongoing assessment and treatment must be performed while en route to the destination hospital.

Contact the receiving facility as soon as possible. Ample notification will allow the receiving facility to prepare for the STEMI patient. The 12-lead should be transmitted once it is obtained without delay.

Inquire regarding patient preference of PCI-Capable facility. If there is no preference, the patient will be taken to the nearest PCI-Capable facility.

Regardless of clinical presentation, patients who meet the criteria for this protocol are considered unstable, emergent patients and should be treated and transported as such.

Ensure that the patient is aware of the benefits of bypassing to a PCI facility, including availability of a cardiologist and a cardiac catheterization laboratory (CCL)

Patients that present to the local EMS provider with cardiac symptoms associated with AMI but do not have abnormal ECG findings will also be treated per “General Guidelines and Standing Orders” of the local EMS provider’s General Cardiac Care (Suspected MI) protocol. It is recommended that these patients be transported to a hospital with PCI capabilities and the availability of a cardiologist is preferable.

## **Pre-Hospital Triage Criteria**

The purpose of pre-hospital triage criteria is to:

1. Have a mechanism to communicate resource availability to EMS providers so that decisions about appropriate transport can be made.
2. Ensure that patients are delivered, by the fastest means available, to the nearest appropriate facility that has the appropriate capacity and capability to provide stabilization and care.

Hospitals should communicate the status with EMS providers regarding capability and capacity of specialty care coverage.

Ground or air medical transport decision will be based on patient condition and medical needs, availability of ALS, BLS, and air medical services, and informed patient preference.

## Golden Crescent Area Stroke Facilities

<b>Level I Stroke Centers</b>				
<b>Facility</b>	<b>Address</b>	<b>City</b>	<b>Phone Number</b>	<b>Notes</b>
St. Luke's Episcopal	6720 Bertner Ave.	Houston	832-355-4146	stroke team pager
Brackenridge Hospital	601 E. 15th St.	Austin	512-458-1121	neurologist on call
Seton Medical Center	1201 W. 38th St.	Austin	512-458-1121	neurologist on call
Methodist Hospital	6565 Fannin	Houston	713-394-6804	transfer line
St. David's Medical Center	919 E. 32nd St	Austin	512-544-8555	
Memorial Herman Hospital	6411 Fannin	Houston	713-704-2577	
University Hospital	4502 Medical Dr.	San Antonio	210-358-2500	
Methodist Hospital	7700 Floyd Curl Dr.	San Antonio	210-575-7405	patient placement line

<b>Level III Stroke Centers</b>			
<b>Facility</b>	<b>Certification</b>	<b>Designation</b>	<b>City</b>
DeTar Hospital Navarro	J.C. Certified	DSHS Designated	Victoria
Citizens Medical Center	DNV Certified	DSHS Designated	Victoria

<b>Level IV Stroke Centers</b>			
<b>Facility</b>	<b>Certification</b>	<b>Designation</b>	<b>City</b>
Cuero Regional Hospital		DSHS Designated	Cuero
Yoakum Community Hospital		DSHS Designated	Yoakum



## GCRAC Hospital Capability

Hospital	Trauma Designation	Stroke Designation	Neonatal	Maternal	Chest Pain Center	Neuro Surgery	Orthopedic Surgery	Plastic Surgery	Pediatrics
<b>Citizens Medical Center</b> 2701 Hospital Dr. Victoria, TX 77901 Main: 361-573-9181 <b>Trauma:</b> Carolyn Knox <b>Stroke:</b> Cristy Autry <b>Cardiac:</b> Krysta Zavesky	Lead Level III	Designated and Certified Primary Stroke Center  Tele Neurology Services	Level II	Level II	Yes		24/7	Yes	Yes
<b>Cuero Regional Hospital</b> 2550 N. Esplanade St. Cuero, TX 77954 Main: 361-275-6191 <b>Trauma:</b> Judy Mazak <b>Stroke:</b> Judy Mazak	Level IV	Designated Acute Stroke Ready Facility  Tele Neurology Services	Level I	Level I					
<b>DeTar Hospital Navarro</b> 506 E. San Antonio St. Victoria, TX 77901 Main: 361-575-7441 <b>Trauma:</b> Clayton Ley <b>Stroke:</b> Karen Evans <b>Cardiac:</b> Jolene Balboa	Lead Level III	Designated and Certified Primary Stroke Center  Tele Neurology Services			Yes		24/7	24/7	Yes
<b>DeTar Hospital North</b> 101 Medical Dr. Victoria, TX 77904 Main: 361-573-6100 <b>Trauma:</b> Clayton Ley	Level IV		Level III	Level II					Yes
<b>Jackson County Hospital</b> 1013 S. Wells Edna, Texas 77957 Main: 361-782-7858 <b>Trauma:</b> Andrea Page	Level IV								
<b>Lavaca Medical Center</b> 1400 N. Texana Hallettsville, Texas 77964 Main: 361-798-3671 <b>Trauma:</b> Holly Cliffe	Level IV	Tele Neurology Services							
<b>Memorial Medical Center</b> 815 N. Virginia St. Port Lavaca, TX 77979 Main: 361-552-6713 <b>Trauma:</b> Dawn Marek	Level IV	Tele Neurology Services	Level I	Level I					
<b>Yoakum Community Hospital</b> 303 Hubbard Yoakum, TX 77995 Main: 361-293-2321 <b>Trauma:</b> Millie Driskell <b>Stroke:</b> Millie Driskell	Level IV	Designated Acute Stroke Ready Facility  Tele Neurology Services							

## **Plan for Designation of Facilities**

All acute care hospitals in TSA-S currently hold a trauma designation from the Texas Department of State Health Services. The Golden Crescent RAC will support and assist member hospitals with maintaining their designation status.

Two of eight acute care facilities currently hold designation as Primary Stroke Centers (PSC). Two of eight acute care facilities currently hold designation as Acute Stroke Ready Facilities (ASRF). The Golden Crescent RAC will support and assist member hospitals with attaining and maintaining stroke designation.

Four of eight acute care facilities currently hold designation as Neonatal Facilities and four of eight facilities currently hold Maternal Health designation. The Golden Crescent RAC will support and assist all facilities in pursuit of designation with technical needs, education, and networking of regional content experts and leaders.

## **Facility Triage**

The purpose of regional facility triage is to give guidance to hospitals and EMS services regarding hospital capabilities in order for the hospital or EMS to make an informed decision regarding transport or transfer. If an injury or illness exceeds to capability of the facility that receives the patient, then transfer arrangements should be made with a higher-level facility that has the appropriate capacity and capability to care for the patient. In TSA-S, generally transfer should be made to the Level III trauma centers: Citizens Medical Center or DeTar Hospital Navarro. However, if the needs of the patient exceed the capability of either Level III center, the patient should be transferred to a higher level trauma center in San Antonio, Houston, Austin, or Corpus Christi. Each trauma center has defined criteria for their individual patient care capabilities and capacities. Standard of care for transfer of the major trauma patient is that transfer will be accomplished within two (2) hours or less from the time of the patient arrival.

### **BURN CARE**

Trauma Service Area S does not have definitive burn care; therefore all burn patients that meet burn center criteria should be transferred to a burn center as soon as possible.

### **PEDIATRIC CARE**

Citizens Medical Center, DeTar Hospital Navarro, and DeTar Hospital North have pediatric capabilities. However, due to physician capacity, some pediatric major trauma and major medical will be transferred out to appropriate higher level facilities. The decision will be made on a case-by-case basis.

### **STROKE CARE**

Citizens Medical Center and DeTar Hospital Navarro are designated and certified Primary Stroke Centers. Cuero Regional Hospital and Yoakum Community Hospital are designated as Acute Stroke Ready Facilities.

### **CARDIAC CARE**

Citizens Medical Center and DeTar Hospital Navarro are accredited Chest Pain Centers with Primary Coronary Intervention capability.

## **Inter-Hospital Transfer**

The decision to transfer a patient is based upon the needs of the patient and the capabilities and capacity of the receiving hospital. In the case of **emergency** transfer requests, an accepting facility has the responsibility to accept the patient as long as the hospital has the capability to handle the patient's emergency medical condition and the capacity to receive the patient. Emergency transfer requests should be treated with priority and an acceptance or denial (based on lack of capability or capacity) received within 30 minutes of time of request.

### **CITIZENS MEDICAL CENTER**

For emergency transfer requests contact: 361-237-1257 (Intake Coordinator)

### **DETAR HOSPITAL NAVARRO**

For emergency transfer requests contact the emergency department: 361-788-6680

Or

**DeTar Transfer Line:** 361-788-OKAY (6529)

**STEMI Transfer Line:** 1-855-STEMI-GO (783-6446)

## **Medical Oversight**

The development of a regional system of trauma and acute care delivery requires the active participation of qualified physician providers. All EMS and hospital providers have the benefit of medical oversight.

The Golden Crescent RAC is developing a Medical Directors Committee comprised of Medical Director's from member EMS agencies and hospitals. The Medical Director's Committee is tasked with the purpose of reviewing current standards of care, making recommendations for improved process, and making recommendations for education and injury prevention programs.

## **Regional Treatment Protocols**

TSA-S includes both rural and urban areas with two Level III trauma centers, and 6 Level IV trauma centers. There are also two non-designated specialty hospitals. There is currently no single EMS Director since there are multiple EMS and first responder agencies in the region. However, the GCRAC has developed common bypass and pre-hospital triage criteria.

## **Injury Prevention**

Each entity in TSA-S has a commitment to injury prevention. Each hospital is trauma designated and therefore required to participate in injury prevention activities. The Golden Crescent area has many opportunities for injury prevention outreach and education. However, falls and motor-vehicle crashes are a particularly high priority focus.

For several years, the Golden Crescent RAC has also purchased child safety seats and booster seats for distribution to the area children in need.

The Injury Prevention Committee will track the utilization of child passenger safety seats and encourage appropriate education for recipient families. GCRAC also has two regional-owned special needs child passenger safety seats that can be loaned to needy families for short, defined time periods (i.e. femur fractures with spica casts, etc.)

With analysis of the types of injuries seen in the GCRAC region, the Injury Prevention committee has developed regional injury prevention initiatives for use by all of the entities within the GCRAC. These include:

- ATV Safety
- Distracted Driving Prevention
- Fall prevention in the older adult
- Stroke Awareness
- Heat Related Illness Awareness and Prevention
- Stop the Bleed

The GCRAC Injury Prevention program endeavors to evaluate the effectiveness of injury prevention efforts in the region. Therefore, the committee asks that any entity that utilizes the regional injury prevention programs perform a program evaluation and provide feedback to the GCRAC injury prevention committee.

## **Performance Improvement Process**

### **Overview:**

The Golden Crescent Regional Advisory Council (GCRAC) is required by the Texas Department of State Health Services to have a system-wide performance improvement process. To meet this requirement, a process has been developed to collect data and a performance improvement committee has been organized to analyze the data in order to accomplish RAC-wide performance improvement.

The data collected will be analyzed for potential system-wide issues and possible solutions. Information shared for the purposes of Performance Improvement is protected under HIPAA and is protected from discoverability under Texas Health & Safety code 161.032. The data will be presented to the RAC as aggregate and in the context of a system-wide issue. Further, the members of the GCRAC PI committee are required to sign confidentiality agreements prior to each meeting.

### **Performance Improvement Data Collection Process:**

Performance improvement (PI) is based on data. System PI will require that ALL members of the RAC participate by providing the requested information accurately, completely, and timely. Participation in system PI is a requirement of being a member in good standing of the RAC. Non-participation in the system PI will be reported as non-participation in the RAC and could jeopardize funding attached to RAC participation.

The requested performance improvement (PI) data is collected within 60 days from the close of the month from hospitals, ground EMS, and air medical services. Submission may be made using Golden Crescent RAC PI audit tools as approved by the GCRAC PI committee.

### **Use of Data:**

The Golden Crescent RAC PI committee meets at least quarterly to review the aggregate data and any specific concerns with the intent to:

- Identify any opportunities for System-Wide improvement
- Identify and recommend educational opportunities
- Identify and recommend equipment opportunities
- Identify and recommend Injury Prevention and public outreach opportunities
- Identify and recommend processes or procedures that the data suggests would improve the safe delivery of care in the region

### **System Action Plans and Loop Closure:**

As opportunities are identified for system improvement and/or education, the GCRAC PI committee will make recommendations for actions such as education, additions/amendments to the GCRAC system plan, acquiring equipment and/or developing improved system processes.

### **GCRAC PI Committee non-disclosure:**

The Golden Crescent RAC PI committee is a closed committee and members are required to sign non-disclosure agreements before any data is discussed. However, general recommendations based on data are made to the general membership.

## **Stroke**

### **Regional Plan**

This plan has been developed in accordance with generally accepted stroke guidelines and procedures for implementation of a comprehensive Emergency Medical Services (EMS) and stroke system plan. This document does not establish a legal standard of care, but rather is intended as an aid to decision-making in stroke patient care scenarios. Neither does it supersede the physician's right to order treatment.

### **Goals**

Identify and integrate our resources as a means to obtaining commitment and cooperation in the best interest of this population of patients.

Establish system coordination relating to access, protocols/procedures and referrals. These structures will establish continuity and uniformity of care among the providers of stroke care.

Promote internal communication as the mechanism for system coordination which will include the EMS providers, hospitals and members of the Golden Crescent Regional Advisory Council (GCRAC) Stroke Committee.

Create system efficiency that benefits the patient and the programs through continuous quality improvement programs which will identify the patient's needs, outcome data and help develop uniformity in the care of this subset of patients.

Recognition of a facility's capability to treat stroke patients within GCRAC until such time as the State designation process for Stroke Centers is completed by all facilities wishing to be designated.

### **Objective of Stroke Facility Declaration**

To develop a system by which hospitals within GCRAC may declare their stroke capabilities to the RAC.

All hospital facilities within GCRAC should evaluate their capability to care for stroke patients according to the "Stroke Capable Criteria" sheet attached. A copy should be provided to the 911 EMS service in your area as well as to the RAC Committee on Stroke.

This identifies stroke capable facilities for pre-hospital providers to assist them in choosing the most appropriate destination for their patient.

### **Pre-Hospital Triage**

**Goal:** Patients will be identified, rapidly and accurately assessed, and based on identification of their actual (or suspected) onset of symptoms, will be transported to the nearest appropriate stroke facility capable of providing the level of care required.



**Purpose:** In order to ensure the prompt availability of medical resources needed for optimal patient care, each patient will be assessed for the time last known to be neurologically at baseline, the presence of abnormal vital signs, Cincinnati Stroke Scale or MEND score, and pre-existing diseases or other factors predisposing the patient to stroke.

### **System Triage**

Unless immediate intervention (ABC's, cardiac arrest, etc.) is required, patients with an onset of stroke < 3 hours should be taken to a Level 1 (comprehensive) or Level 2 (primary) designated stroke facility for evaluation and treatment.

If a hospital within the RAC has the demonstrated ability to meet the guidelines for diagnosis and initiation of Activase (t-PA) in less than 60 minutes; and has an expedited transfer process with a primary or comprehensive stroke center; that hospital should make known to its EMS service that it has the capacity and capability to care for stroke patients under the 'drip and ship model'.

If stroke symptom onset is > 3 and < 6 hours, the patient should be taken to a stroke facility that can provide diagnostics and stabilization and consult a Level I for the possibility of transfer for potential interventional care within a 60 minute timeframe.

If stroke symptom onset is < 6 hours or  $\leq$  24hrs for ELVO, the patient should be taken to the closest acute care facility for treatment and possible transfer to a stroke designated facility.

### **Helicopter Activation**

**Goal:** Air transport will be appropriately utilized in order to reduce delays in providing optimal stroke care.

Decision Criteria:

- Helicopter activation/scene response should be considered when it can reduce transportation time for patients with an onset of symptoms > 6 hours and  $\leq$  24hrs for ELVO in reaching definitive care.
- Contact the air medical service for assistance in the decision making process.

### **Facility Criteria**

**Goal:** The goal of establishing and implementing facility criteria in GCRAC is to ensure that all regional hospitals use standard definitions to classify stroke patients in order to ensure uniform patient reporting and facilitate inter-hospital transfer decisions.

**Objectives:**

- To ensure that each stroke patient is identified, rapidly and accurately assessed, and based on identification and classification of their actual or suspected onset of symptoms treated appropriately or transferred to the nearest appropriate Primary or Comprehensive stroke center.
- To ensure the prompt availability of medical resources needed for optimal patient care at the receiving stroke facility.

- To develop and implement a system of standardized stroke patient classification definitions.

### **Inter-Hospital Transfers**

**Goal:** The goal for establishing and implementing a facility's inter-hospital transfer plan is to ensure those stroke patients requiring additional or specialized care and treatment beyond a facility's capability are identified and transferred to an appropriate facility as soon as possible.

#### **Objectives**

- To ensure all regional hospitals make transfer decisions based on standard definitions which classify stroke patients according to GCRAC facility triage criteria.
- To identify the capability of facilities to treat stroke patients according to guidelines consistent with the Brain Attack Coalition.
- To establish treatment and stabilization criteria and time guidelines for GCRAC patient care facilities.

### **Transfer Discussion**

- The level of healthcare resources required for acute care patients is outlined in the pre-hospital triage criteria. When a stroke patient is identified, a Stroke Alert should be called, similar to the process for an unstable trauma patient.
- The time guideline for stroke patients in TSA-S *is to transfer stroke patients with an onset window > 3 and < 6 hours or ≤ 24hrs for ELVO immediately to a Comprehensive Stroke Center.*
- *All hospitals are encouraged to partner with a Comprehensive stroke center to which they can transfer patients requiring interventional care on an acute basis.*

### **System Performance Improvement**

Each facility caring for stroke patients must have a system in place to review stroke cases for performance improvement purposes. Additionally, the facility must participate in the GCRAC Stroke Committee.

**Goal:** To establish a method for monitoring and evaluating system performance over time and to assess the impact of stroke system development.

#### **Objectives:**

- To identify regional stroke data filters which reflect the process and outcome of stroke care in GCRAC.
- To provide a multidisciplinary forum for stroke care providers to evaluate stroke patient outcomes from a system perspective and to assure the optimal delivery of stroke care.
- To facilitate the sharing of information, knowledge and scientific data.
- To provide a process for medical oversight of regional stroke operations.

## Discussion

- In order to assess the impact of regional stroke development, system performance must be monitored and evaluated from an outcomes perspective. A plan for the evaluation of operations is needed to determine if system developments is meeting its stated goals.
- Direction – the direction for the development of a GCRAC Regional PI Program is derived from the Texas EMS Rules: Section 157.124 Regional EMS Trauma Systems: (2.K) of the EMS rules (effective 2/17/92) requires the development of a “performance management program that evaluates outcome from a system perspective”.
- Authority – The authority and responsibility for regional performance improvement rests with the Regional Advisory Council. This will be accomplished in a comprehensive, integrated manner through the work of the Performance Improvement, Stroke and Pre-hospitals committees who will provide oversight for regional stroke performance improvement. Referrals for follow-up and feedback to and from the Pre-hospital Care Committee and providers ensure system-wide, multidisciplinary performance improvement.
- The stroke committee will determine the type of Stroke data and manner of collection, set the agenda for the Stroke PI process within the regularly-scheduled meetings of the committee and identify the events and indicators to be evaluated and monitored. Indicator identification will be based on high risk, high volume, and problem prone parameters. Indicators will be objective, measurable markers that reflect stroke resources, procedural/patient care techniques, and or systems/process outcomes.
- Any deviation will be evaluated from a system, outcomes prospective and sentinel events will be evaluated on a case by case basis. Activities and educational offerings will be presented to address knowledge deficits and case presentations or other appropriate mediums will be designed to address systems and behavioral problems. All actions will focus on the opportunity to improve patient care and systems operation. The results from committee activities will be summarized for entities involved, for follow-up and loop closure. Committee follow-up and outcome reports will be communicated on a standard format. Data collected from individual hospitals is required for purposes of PI.

## **Cardiac Care**

### **Regional Plan**

This plan has been developed in accordance with generally accepted cardiac care guidelines and regionalization guidelines developed by Mission Lifeline. This document does not establish a legal standard of care, but rather is intended as an aid to decision-making in cardiac care patient care scenarios. Neither does it supersede the physician's right to order treatment.

### **Goals**

- Identify and integrate regional cardiac care resources
- Establish system coordination relating to access, protocols/procedures and referrals
- Promote internal communication as the mechanism for system coordination which will include the EMS providers and hospitals
- Create system efficiency that benefits the patient and the programs through continuous quality improvement programs which will identify the patient's needs, outcome data and help develop uniformity in the care of cardiac patients

### **Regional Cardiac Care Initiatives:**

#### **12-lead ECG transmission system**

Primary response ambulances have been equipped with 12-lead ECG tele-transmission systems to facilitate communication with the regional PCI centers located at Citizens Medical Center and DeTar Hospital Navarro. Communication of 12-Lead ECG data from the field allows for more timely activation of the STEMI-Alert system and facilitates timely first medical contact to PCI times.

#### **GCRAC "ICE" Initiative**

The Golden Crescent RAC has developed a regional therapeutic hypothermia protocol to improve outcomes of post cardiac arrest patients and to comply with AHA's ECC current guidelines (2015). Each primary response ambulance has received a cooling unit to have cooled saline available for rapid initiation of cooling for patients who have return of spontaneous circulation in the field. The emergency departments also have cooling capabilities. Citizens Medical Center and DeTar Hospital Navarro have ICU's that are capable of continuing the therapy and re-warming per the guidelines.

## **Air Medical & Inter-Facility Transport**

### **REGIONAL HELICOPTER ACTIVATION PROTOCOLS**

#### **Purpose:**

The purpose of the GCRAC Air Medical Provider (AMP) Protocol is to provide guidelines for a standardized approach for ground emergency medical service providers to request a scene response by an AMP. The intent is to reduce delays in patient care and reduction in mortality and morbidity. There cannot be a single protocol developed to meet the needs for every situation. In certain situations the patient cannot be handled at a local facility or there are no local facilities in close proximity to the scene the patient should be considered a candidate for air medical transport to the appropriate facility. The primary determinant should be to get the patient to the most appropriate facility in the shortest amount of time.

Local EMS protocols should be developed in conjunction with the local health care facilities and EMS Medical Directors as to when a patient should be transported to the local facility or when the patient should be flown from the scene to a higher level trauma center or specialized medical services. The AMP Activation protocol should be utilized not only in isolated instances but also in close conjunction with the Facility By-Pass and Triage Protocol (see policy for further information).

#### **AMP Expectations:**

Several factors should be considered when evaluating the need for activating an air medical transport. There are numerous scenarios when it may be beneficial to activate an AMP. One thing ground EMS providers should focus on is getting the patient to the most appropriate facility in the shortest amount of time. The ground EMS providers should also pay particular attention to:

- The patient meets “Major Trauma Criteria / Trauma Alert” as set by local criteria.
- The patient requires specialized medical treatment not available at local facilities. (cardiac catheterization, stroke center, transplant services, etc.)
- Number of patients will overwhelm EMS local resources or will overwhelm local hospital resources.
- Patient is not easily accessible by ground EMS due to terrain or inclement weather (remote locations, icy roads, bridge out, etc...).
- Ground EMS Providers must focus on two main components: Proper Clinical Care and total “Response Times” when considering to utilization of AMP’s.

Total Response Times = response to the scene + scene time of Air med Crew + transport time to facility. The goal is to choose the transport mode that will deliver the patient to the most appropriate facility the fastest.

- Extended Extrication: which would allow time for the AMP to respond as the extrication is in process.
- The closest available AMP(s) that meet the needs of the patient should be utilized.

- Patients that meet air medical transport criteria should be transported to the closest most appropriate facility.

### **AMP Selection Criteria:**

In order to assure GCRAC goals as set forth in the System Plan and other guidelines are followed. When choosing the appropriate AMP, the ground EMS provider should look at several aspects when establishing their local protocols and these minimums should be adhered to. Each AMP providing service to the GCRAC should:

- Meet the minimum participation standards as established by the GCRAC.
- Participate as requested in the GCRAC performance improvement activities
- Clinical capabilities of the AMP

The AMP chosen should also best meet the patients' needs in reference to clinical care and patient transport:

- Response Times (response time + scene time + transport time)
- Operational interface and safety. AMP should demonstrate safe operations at all times. Safe operations standards include safety standards such as those endorsed by the Federal Aviation Administration, the Association of Air Medical Services, the National EMS Pilots Association, the Air Surface Transport Nurses Association, and the International Association of Flight Paramedics.
- Each AMP in the GCRAC should be CAMTS accredited or "actively seeking CAMTS accreditation"
  - This in an attempt to assure minimum safety requirements are met by each AMP

### **Dispatching Information:**

Normal dispatching information should be adhered to as far as:

- Name of requesting Agency
- Location of Incident (Street address with cross street / GPS)
- Ground Contact and radio frequency to be used
- Nature of call
- Number of patients
- Other AMP's if any, that have been activated, or contacted, or declined the flight due to weather conditions.
- LZ instructions

If any of the above information changes then the ground EMS provider should notify the AMP as soon as possible.

When the request for air medical transport is accepted by the AMP, the AMP should provide the following information:

- Unit responding
- Location where the unit is responding from
- Estimated time of arrival of the aircraft
- Special circumstances (fuel stop, turn around, etc.).

If any of the above information changes then the AMP should notify the ground EMS provider as soon as possible.

Remember the goal is to get the patient to definitive care as soon as possible. Access to air medical transport services should assure prompt dispatch of a helicopter when appropriate while discouraging dispatch when it's not necessary. Access should be made by persons with training in the prehospital care of injured patients, knowledge of the local air medical transport guidelines and when possible participants of the GCRAC (TSA-S) to ensure the appropriate AMP is dispatched and criteria is followed. In most situations access should be made by the local EMS agency, but trained first responders can also provide early access in some situations.

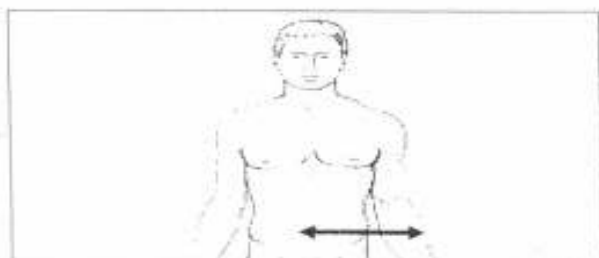
### **Establishment of appropriate Landing Zone:**

The Air Medical Committee will assist stakeholder and partner organizations with determining appropriate landing zones and will education regarding establishment and security of those zone.

### **Air Medical Transport of Obese Patients:**

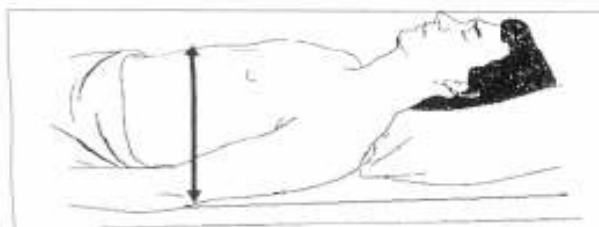
Transport of Obese patients will depend upon both weight and girth measurements. Below is a description of measurement of girth. The air medical crew will work with the facility to determine if air transport of these patients is possible.

Measurement of the Sagittal Plane (width): \_\_\_\_\_ inches



From the umbilicus, measure the patient's left side by placing a hard square object, (i.e., book, clipboard); compress the adipose tissue medial to the patient and measure. The arrows depict the area to be measured.

Measurement of the Axial Plane (height): \_\_\_\_\_ inches



With patient lying supine, take a small straight edge, (i.e., a yard stick or broom handle) and lay it on the patient's abdomen, then with a tape measure or other measuring device, measure up to the straight edge and record. The arrows depict the area to be measured.

## **Regional Emergency Management**

### (Coalition Planning Group - CPG)

The Golden Crescent RAC has developed an active regional emergency management committee known as the Coalition Planning Group (CPG). The Coalition Planning Group meets monthly with the primary focus of support regional capability and capacity for emergency management planning, preparedness and response.

Specific areas of focus include:

- Supporting compliance with the National Incident Management System (NIMS) through NIMS education, training and utilization of NIMS during drills and emergency events.
- Education and Preparedness Training
- Development and Participation in regional Emergency/Disaster Exercises, Evaluations and Corrective Actions.
- Planning for response to the needs of at-risk populations (i.e. diverse cultures, limited English proficiency or non-English speaking, transportation disadvantaged, chronic medical disorders, and/or pharmacological dependent.)
- Development, Implementation and testing of Interoperable communications
- Tracking of Bed Availability via Hospital Available Beds for Emergencies and Disasters (WebEOC).
- Participation in the regional administration of the Texas Disaster Volunteer Registry (ESAR-VHP)
- Fatality Management
- Medical Evacuation/Shelter-in-place
- Partnership/Coalition Development through Memorandum's of Understanding (MOU's) and development of regional Medical Operations Center (MOC)
- Develop plans for Alternate Care Sites
- Develop a process for access and utilization of mobile medical assets
- Develop a process for access and utilization of pharmaceutical caches
- Develop a system to purchase, use and rotate personal protective equipment
- Develop capacity and processes for appropriate decontamination activities
- Develop plans for integration of the Medical Reserve Corps with the regional healthcare system.
- Develop plans that relate to the resilience and protection of critical facilities and services.
- Participate with plans for integration with the Statewide Emergency Medical Task Force (EMTF)

#### **GCRAC Regional Initiatives:**

- Use and proficiency in the WebEOC system for such activities as regional situational awareness, bed reporting and TxENT system utilization
- Development of the Golden Crescent Medical Operating Center (GCMOC) for coordination of regional medical assets in an emergency/disaster situation
- Close collaboration with the Department of Health, the various Offices of Emergency Management, and the Department of Public Safety regional Liaison for planning, training and exercises.



# **Golden Crescent Medical Operations Center (GCMOC)**

## **Operations Manual**

### **Overview**

This Operations Manual is designed to provide information to help efficiently activate and operate the TSA-S Golden Crescent Medical Operations Center (GCMOC).

The GCMOC is located at the Victoria Emergency Operations Center at 205 N. Bridge, Suite B-101, Victoria, TX 77901.

The GCMOC may operate independently from a larger Emergency Operations Center (EOC).

**Mission:** *To provide the facilities, communications, processes and protocols to assist hospitals, EMS, public health and others to efficiently coordinate medical care for the citizens of the 6-county TSA-S region during a major event of any cause.*

**Organization:** The organization and staff of the GCMOC will vary with the severity and complexity of the event. The following are positions that could be occupied during mid- to large events:

- GCMOC Director
- Hospital Representatives
- EMS Group Supervisor
- Public Health and/or Mass Care Leader

### **Activation**

The principle guiding an activation is whether an event presents a challenges to the city/county/region that would require coordination and support to address health and medical care issues.

The following individuals have the authority to activate the GCMOC:

- 1.) GCRAC Director / RAC Chair
- 2.) Any Regional Emergency Management Coordinator
- 3.) Any Hospital CEO or Designee
- 4.) COV or Region 8 Public Health Director / Public Health Authority

Requests to activate may come from hospital emergency management personnel, regional Emergency Operation Center, State Medical Operation Center, and others; however, the following algorithm was developed by the Hospital Planning Group to ensure continuity of operations. Requestors must submit their request to activate the GCMOC to one of the people listed below. This can usually be done through a phone call.

#### **GCRAC Chair:**

Carolyn Knox (or her designee)  
Office: (361) 572-5128  
Cell: (361) 500-1660  
Email: [carolynk@cmcvtx.org](mailto:carolynk@cmcvtx.org)

#### **TSA-S Hospital Preparedness Program Coordinator**

Kyle Jacobson  
Office: (O)210-542-6378  
Email: [kyle.jacobson@strac.org](mailto:kyle.jacobson@strac.org)

MEDCOM – call 24/7 if you cannot reach the above mentioned people:  
 (210) 233-5815 OR (800) 247-6428

Please refer to Appendix 2C for a print out of the Activation Algorithm.

### **Types of Activations:**

Training: GCMOC training may be conducted in the Victoria EOC.

Drill: The GCMOC will be set up for Functional Drills or part of a Full-Scale Exercise. These are planned in advanced, are usually preceded by planning meetings, and involve numerous hospitals and other entities.

Event: Real events are broken down into two categories: those expected to last twelve (12) hours or less and those expected to last more than (12) hours.

*Limited Event* – less than 12 hrs. This type of activation is for those events that require limited response and coordination efforts that are not expected to last long enough to require a second shift. These limited event activations may only require minimal staff to operate the GCMOC.

*Extended Event* – more than 12 hours. This type of activation is for those events that are expected to last long enough to require longer operating hours, multiple work shifts, multiple days of operation and/or 24-hour operations.

### **Levels of Activation:**

There are 4 levels of activation depending on the event's response conditions.

Level 4 – Normal Operations

Level 3 – Increased Readiness (Virtual)

Level 2 – Partial Activation / Escalated Response Conditions (Virtual/Physical)

Level 1 – Full Activation / Emergency Response Conditions (Physical)

Please refer to Appendix 2C for a full definition of each level.

### **Notification to GCMOC Staff:**

#### Pre-Activation:

Some events, such as a hurricane, provide some time prior to the actual activation of the GCMOC. In such an event, GCMOC staff members will receive an alert from the Everbridge notification system. The message will provide the basic information on the event and the expected time to report to the GCMOC.

#### Activation:

Upon activation of the GCMOC, an Everbridge message will go to all GCMOC staff advising them of the activation and directing them to report to the GCMOC for duty.

**Backup alert notification:**

If Everbridge fails to operate, individual phone calls may be made to GCMOC staff alerting them of the activation. The severity of the event itself may cause staff to report to the GCMOC voluntarily without a notification.

**Coordination with Bus Operations:**

Bus Operations could be required for an exercise, local event, or major disaster. The specific needs for bus transportation will drive this operation. Depending on the size and scope of the bus operations, an entire section might be established to manage this operation. The first requirement is to determine the type and number of buses required. From this information sources can be contacted to obtain needed assets. It is very important to continually be in contact with operations to update the need for bus transportation. Bus operations (charter, school, other) must be managed closely. Coordination with operations on where they are needed is critical. Logistical support is important, especially when setting up a staging area or when buses are needed for extended periods. Tracking the location of buses is important. Providing a radio or GPS to each bus may be a good tool. There is a Bus Tracking Board on WebEOC that is helpful in tracking buses between stops. Keeping close control of bus requests will prevent big reimbursement challenges after the event. Only one or two people should be authorized to contract for buses. These contracts need to be flexible to follow the needs of the operation.

**Coordination with non-acute care facilities (other Coalition members):**

Support to non-acute care facilities such as LTAC, nursing homes, assisted living facilities, home health, hospice, etc... may be requested from the GCMOC. Based on the situation, a determination needs to be made to determine if the GCMOC is the right entity to respond to these requests. When a request is accepted, the GCMOC will respond as it does to all other requests. The request is validated, specific information obtained, needed assets determined, specific entities assigned responsibilities, timetables established and operations monitored.

**Remote Operations**

The GCMOC is how the region manages major medical events. It is not tied to the Victoria EOC. If the Victoria EOC is unavailable or not functioning for any reason, the GCMOC can operate at other locations – or virtually. It is a regional medical operations system based on current and accurate information, good communications and decision-making at the operational level.

**Job Action Sheets - pending****WebEOC**

The following boards will be used throughout the GCMOC activation process:

- Personnel Check-in
- Incident Significant Events
- Incident Significant Events – Medical
- Medical Dashboard
- Hospital Census Summary
- Disaster Victim / Patient Tracking

- STAR III
- Nursing Home Bed Report
- Battle Rhythm

Basic WebEOC training is available monthly through STRAC via conference call, and quarterly during Hospital Planning Group meetings. It is also offered on an “as needed” basis by the Hospital Preparedness Program Coordinator.

## **GCRAC Emergency Communications SOP**

GCRAC existing communications network consists of landline telephone, cellular telephone, internet, and radio which will serve to perform the initial and basic communications effort for emergency operations. During emergency operations, GCRAC healthcare facilities will maintain their existing equipment and procedures for communications as long as they are available. If those systems fail to function, GCRAC participating agencies may resort to using the emergency communications equipment provided to them through the DSHS Hospital Preparedness Program.

All participating GCRAC healthcare agencies will install, use, and regularly test the satellite phones and HAM radios purchased through the DSHS Hospital Preparedness Program. Regular testing of GCRAC emergency communications equipment will ensure interoperability of regional resources. Satellite phones will be tested monthly. Each facility will be responsible for testing their HAM Radios utilizing either certified hospital staff or by working with local HAM operators to test the equipment. Healthcare agencies will ensure that appropriate personnel are trained in the use of satellite phones and HAM radios and are able to effectively operate this equipment. GCRAC agencies shall contact the HPP Coordinator for any technical or training needs that may be identified. The HPP Coordinator will provide a Monthly Hospital Communications Checklist to facilities to document the testing of emergency communications equipment. All testing of emergency communications equipment shall be documented on this checklist and made available to the HPP Coordinator during annual facility visits. The HPP Coordinator will also be responsible for documenting inventory of communications equipment and communication plans on annual facility visits.

GCRAC utilizes Everbridge for mass notifications during exercises and emergencies. The Everbridge system allows for efficient notification of regional hospital personnel to provide information regarding disasters, events, and exercises. GCRAC also uses WebEOC which is a web-enabled, incident and event management system. WebEOC is a collaboration tool that creates a common operating picture and enables users to manage incidents and events. These two tools will be heavily depended upon during emergencies and exercises that take place in the Golden Crescent region.

## Medical Director Attestation

**By signing below, I am attesting that I have reviewed the Golden Crescent Regional Advisory Council Trauma and Acute Care System Plan.**

With review, I have identified the following opportunities for improvement: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I have reviewed the plan and have found no opportunities for improvement.

\_\_\_\_\_  
**Printed Name**

\_\_\_\_\_  
**Title**

**Phone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Agency/Facility Representing:** \_\_\_\_\_

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

<p>**Please forward a copy of signed attestation to: Golden Crescent Regional Advisory Council 2701 Hospital Drive Victoria, TX 77901</p>	<p>Question regarding participation in the GCRAC Medical Directors Committee should be forwarded to: John McNeill, D.O. 2701 Hospital Drive, Victoria, TX 77901</p>
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## **Appendix**

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## **Appendix 1: Golden Crescent Healthcare Coalition (GCHCC)**

### **Membership Requirements:**

To become a member of Golden Crescent Healthcare Coalition (GCHCC), the entity must:

- (a) Be identified by the GCRAC as an organization or entity that would help forward the GCRAC purpose of “GOLDEN CRESCENT COALITION BUILDING FOR HEALTHCARE SYSTEM PREPAREDNESS”
- (b) Demonstrate active participation in designated emergency management meetings, planning activities, exercises and drills, actual responses and recovery efforts as appropriate.
- (c) Be compliant with all requested documentation, agreements, reporting, documents, and financial requirements.
- (d) Approved Golden Crescent Healthcare Coalition Members will not have regular GCRAC voting privileges.
- (e) Approved Golden Crescent Healthcare Coalition Members will not have to meet the data submission or performance improvement requirements.
- (f) Approved Golden Crescent Healthcare Coalition Members will not be eligible for GCRAC funding other than that specifically designated to the Golden Crescent Healthcare Coalition and/or OASPR/HPP funding sources that are dedicated to Healthcare Coalition.
- (g) Approved Golden Crescent Healthcare Coalition Members will not be held to the requirement of attending at least 75% of the GCRAC general membership meetings. However, they will be expected to regularly attend the Golden Crescent Healthcare Coalition Committee meetings to be eligible for funding that are specifically designated to the Golden Crescent Healthcare Coalition n and/or OASPR/HPP funding sources that are dedicated to Healthcare Coalition.

### **Bylaws:**

The Golden Crescent Regional Advisory Council’s (“GCRAC”) Board of Directors (“Board”) recognizes the Golden Crescent Healthcare Coalition (“GCHCC”) as the Preparedness Coalition for the geographic area encompassing TSA-S (“Trauma Service Area” S), and as a Standing Committee of the Board, with the authority, responsibilities and specific duties as described in this Charter.

The GCHCC shall consist of professions, individuals, and entities located in the six-county TSA-S region involved in any aspect of regional medical preparedness for, response to, and recovery from a major-medical/public health event in the region, state or nation.

The GCHCC general membership *must* consist of representatives from the following organizations:

- Acute-Care Facilities
- Emergency Medical Services
- Emergency Management Agencies
- Public Health Organizations



The GCHCC general membership *may* consist of representatives from the following organizations:

- Ambulatory Surgical Centers
- Clinics, Rehabilitations, and Therapy Centers
- Community Mental Health Centers
- Comprehensive Outpatient Rehabs
- End-Stage Renal Disease Facilities
- Home Health Agencies
- Hospice
- Immediate Care Facilities – Intellectual Disability
- Long-Term Care Facilities
- Programs for the All-Inclusive Care for the Elderly
- Rural Health Care – FQHC
- County government
- City Government
- Fire Service
- Law Enforcement
- Private Industry

#### Membership Votes

Voting: All members of the GCHCC shall have voting rights except for the Organization’s Hospital Preparedness Program Coordinator. No employee of the Organization shall have voting rights in the GCHCC.

Non-Voting: Invited guests and any employees of the Organization, including, but not limited to the Organization’s Director of Preparedness and its Executive Director.

#### Mission and Scope

The mission and scope of the GCHCC is to encourage collaborative healthcare community planning and emergency preparedness to natural and man-made disasters affecting the GCRAC region by providing an aligned forum for persons, businesses, healthcare entities, and response agencies within or surrounding the geographic boundaries of the GCRAC.

Responsibilities of the GCHCC include, but are not limited to, the following:

- Coordinate with local, regional and state officials/jurisdictions in planning efforts for the healthcare community.
- Identify and determine gaps in planning, resources, education, or training and develop action plans to support educational and process refinement.
- Facilitate integration with local, regional, state, and federal partners.
- Assist in development and execution of exercises and drills based on identified needs/issues, formulate corrective action plans, and perform follow-up measures to ensure best practices have been instituted.
- Ensure sustainment of medical coordination through support of the Golden Crescent Medical Operations Center (“GCMOC”).
- Coordinate planning with response partners for unique needs of special medical populations/at-risk individuals.
- Disseminate planning and response initiatives.

- Provide and receive guidance and recommendations to/from the Board and other Committees, including ad hoc committees, on planning initiatives, program development and grant expenditures.

The GCHCC may establish subcommittees as part of the GCHCC committee structure designated to accomplish these responsibilities.

### Governance

The Coalition Planning Group shall serve as the organizational structure that supports the Healthcare Coalition activities, as well as integration with the ESF-8 lead agency.

### GCHCC Coordinator

The HPP Coordinator will act as the GCHCC Coordinator, and will be the spokesperson for the GCHCC, with the PHEP Coordinator acting as the spokesperson in the absence of the HPP Coordinator.

Responsibilities of the GCHCC Coordinator include, but are not limited to, the following:

- Setting the agenda for the GCHCC Meetings with the assistance of the Coalition Planning Group.
- Ensuring all meeting preparations are executed
- Executing any/all follow-up items from the Coalition Planning Group meetings and GCHCC meetings
- Communicating the activities of the GCHCC to the GCRAC Board of Directors via the GCRAC Chair, and following up on issues identified

### Coalition Planning Group

Responsibilities of the Coalition Planning Group include, but are not limited to, the following:

- Working with the Hospital Preparedness Program Coordinator on setting the agenda and ensuring that agenda items are addressed
- Facilitating achievement of overall regional healthcare coalition priorities
- Identifying planning gaps within the purview of the GCHCC and addressing those issues in an appropriate manner
- Referring planning gaps or concerns outside the purview of the GCHCC to the appropriate committees/departments

### Reporting Structure

The GCHCC Coordinator reports each meeting to the GCRAC Board Chairman.

### Budget

Currently, the GCHCC will utilize Hospital Preparedness Program (HPP) funds to enhance coalition development and fund an annual coalition sponsored conference. Other funding may include fees generated from the annual conference and Public Health Emergency Preparedness (PHEP) funding for hospitals and public health entities that may support a regional medical response/recovery capability, and other sources.

### Participation

The Golden Crescent Healthcare Coalition has defined participation requirements for membership and eligibility for funds distributed by the GCHCC.

These requirements are:

1. Each Golden Crescent HCC member shall have at least 1 representative serve on either the Steering Committee or an HCC sub-committee as a contingency for membership. GCHCC organizations who do not charge for their service are not mandated to participate on any GCHCC committees.
2. Attendance of at least 75% of all member organizations to the Golden Crescent HCC general membership meetings. Members of the GCHCC are expected to attend and actively participate in all meetings. If a GCHCC member is unable to attend, this should be communicated in advance to the Coordinator.

## Appendix 2: Forms

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## Appendix 2A: Pre-Hospital Forms

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Standard Procedure (Skill)  
**WHOLE BLOOD PROCEDURE**

**Clinical Indications**

- Penetrating Trauma
- Blunt Trauma
- Hemorrhagic Shock
  - Traumatic
  - Medical

**Clinical Contraindications**

- Known transfusion reaction
- Religious beliefs
- Does not meet transfusion criteria

P	EMT- P	P
---	--------	---

**Actions:** Improves blood volume and pressure with the ability to carry oxygen. Hemostatic properties to control bleeding

**Dose:**  $\geq 5$  years of age

- 1 unit IV/IO via blood Y tubing
- In the event the bleeding is controlled, (e.g., tourniquet is applied and bleeding is stopped), proceed to administer blood back to normotensive levels

**Side Effects:**

- Transfusion Reaction (similar to allergic reaction but may also have chills)
- Fever
- Pain at the injection site
- Low back pain
- Vomiting
- Hemoglobinuria

**Notes:**

- Must be stored in temperature-controlled environment
  - Must be maintained in the approved cooler
  - Use blood Y when giving
  - Blood product expiration must be verified by 2 crew members prior to administration
  - IV access should be 20g or larger
  - Efficient documentation and transfer of all product related forms
  - If possible utilize a 2nd line for medications. If the blood line needs to be used stop the blood infusion, flush with 20cc of NS, give medications, flush with 20cc NS, restart blood
  - Utilize in line fluid warmer with all blood administration
  - Consistently watch for transfusion reaction. If any exists, stop transfusion, change all lines.
- Bag all blood products to be returned to the blood bank and, if needed, go to the Allergic Reaction protocol to treat
- Do not delay transport to initiate blood products. Start enroute to the receiving facility
  - Medical Patients can be treated PRN with this guideline

**Complete Whole Blood administration form in its entirety and leave with the ER staff**

Be suspicious of a patient on Beta Blocker medication that you suspect may be in hemorrhagic shock but does not present with an increased heart rate. Contact Medical Control if needed.

**TRANSFUSION CRITERIA**

Signs of hemorrhage--high index of suspicion of active internal bleeding or visual evidence of external bleeding along with any one of the following:

Age  $\geq 5$

Single SBP  $< 90$ mmHg

Single HR  $> 120$

Shock Index  $> 1.0$

Pulse pressure  $< 45$

ETCO<sub>2</sub>  $< 25$ mmHg

Known or presumed anticoagulant use or dual anti-platelet therapy

The shock index (SI) is defined as heart rate divided by systolic blood pressure, with a normal range of 0.5 to 0.7 in healthy adults.

Pulse pressure is the difference between systolic and diastolic blood pressure. It is measured in millimeters of mercury (mmHg).

Proc 49

## TRANEXAMIC ACID ADMINISTRATION GUIDELINES

**Background:** Tranexamic acid is an antifibrinolytic agent in common use for treatment of a variety of bleeding disorders. Recent randomized controlled evidence indicates a significant mortality benefit in the administration of tranexamic acid to trauma patients with significant hemorrhage or considered at risk of such within 8 hrs of injury. Subset analysis of this research demonstrated the greatest benefit is within the first 3 hrs of injury.

**Criteria:** Administer TXA for adults (age 16 years or greater) in the setting of hemorrhagic shock from trauma with a suspected need for massive blood transfusion due to marked internal or external blood loss. The following criteria must be met prior to administration:

- Trauma patients, appearing to be **at least 16 years old**,
- with **ongoing significant hemorrhage** (systolic blood pressure less than 90 mmHg and/or heart rate more than 110 beats per minute), or
- who are **considered to be at risk of significant hemorrhage**,
- and are **within 3 hours of the injury**.

**Exclusion Criteria:**

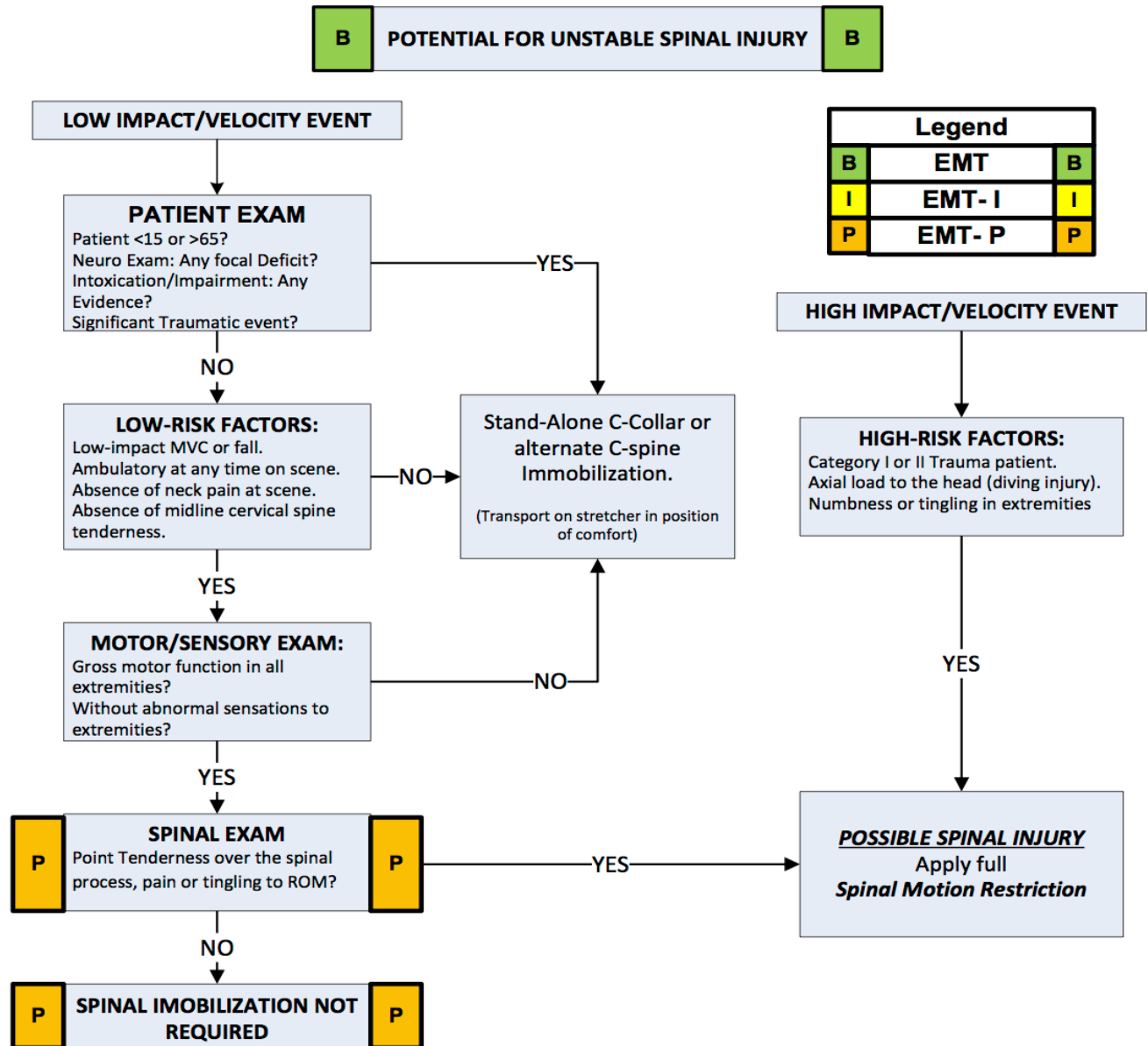
- Evidence of disseminated intravascular coagulation
- Past history of thrombotic disorder such as deep venous thrombosis or pulmonary embolus

**Treatment:**

Loading Dose: 1 gm of TXA in 100mL of normal saline and infuse over 10 minutes. (10mL/min.)

Maintenance: 1gm of TXA in 500mL of normal saline and infuse over 8 hours  
60mL/hr)

# GCRAC Spinal Motion Restriction (SMR)



**PEARLS**

- The spine assessment procedure evaluates the risk of spine injury in patients with definite or potential/questionable mechanism of injury. Using evidence-based medicine, this procedure is utilized to balance the risks and benefits of spine motion restriction.
- The decision to **NOT** implement spinal immobilization in a patient is the responsibility of the paramedic. In very old and very young patients, a normal exam may not be sufficient to rule out spinal injury.
- Specialty patients (geriatric, bariatric, CHF, arthritis, cancer, or other underlying spinal or bone disease). Consider the use of IMMOBILE-VAC Vacuum Full Body Mattress.

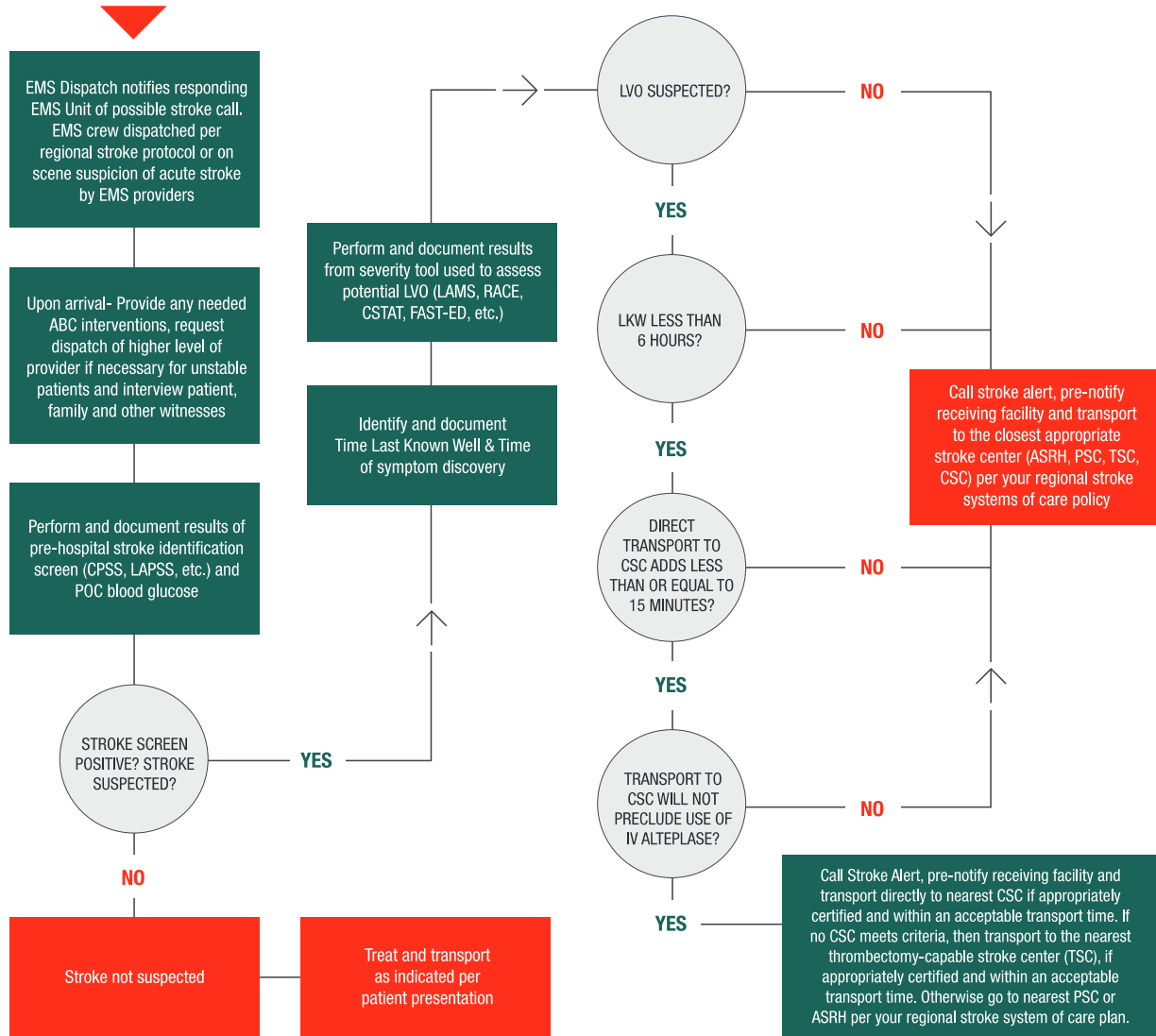


# SEVERITY-BASED STROKE TRIAGE ALGORITHM FOR EMS



Together to End Stroke™

Mission: Lifeline® STROKE



## ON SCENE

- Interview patient, family members and other witnesses to determine Last Known Well (LKW) time and time of Symptom Discovery.
- Attempt to identify possible stroke mimics (eg, seizure, migraine, intoxication) and determine if patient has pre-existing substantial disability (need for nursing home care or inability to walk without help from others).
- Encourage family to go directly to Emergency Department if not transported with patient and obtain mobile number of next of kin and witnesses.
- If Mobile Stroke Unit available-follow Mobile Stroke Unit Protocol.

- Each EMS agency should utilize a published and validated stroke screen to assess patients with non-traumatic onset of focal neurologic deficits and validated tool to assess possible Large Vessel Occlusion (LVO).
- Patients who are likely eligible for IV alteplase should be routed to the nearest ASRH or PSC if transport to the nearest CSC or TSC would make them ineligible for IV alteplase due to time delays. CSC is always the preferred destination over TSC if CSC accessible within acceptable transport times.
- Collect a list of current medications (especially anticoagulants) and obtain patient history including co-morbid conditions (eg, serious kidney or liver disease, recent surgery, procedures or stroke) that may impact decisions.

## Golden Crescent Regional Advisory Council

### TSA-S

#### Air Medical Transport Criteria

#### Trauma Patient Evacuation Considerations

Choose all that apply

##### ONE OR MORE RED CRITERIA

- R1** GCS  $\leq$  13 due to trauma
- R2** ACTIVE airway assistance required (i.e., more than supplemental O<sub>2</sub> without airway adjunct)
- R3** No radial pulse AND heart rate  $\geq$  120
- R4** BP < 90 systolic
- R5** Pelvic fracture or flail chest
- R6** Acute Paralysis, loss of sensation, or suspended spinal cord injury.
- R7** Amputation proximal to wrist or ankle
- R8**  $\geq$  15% BSA 2<sup>nd</sup>/3<sup>rd</sup> degree burns
- R9** Penetrating injury to head (or depressed skull fracture), neck, torso, extremities proximal to elbow or knee, excluding superficial wounds
- R10** Crushed, degloved, mangled, or pulseless injured extremity
- R11** Two or more long bone fractures (on different extremities)

##### TWO OR MORE BLUE CRITERIA

- B1** Reliable loss of consciousness > 5 minutes
- B2** Sustained respiration rate  $\geq$  30 or  $\leq$  10
- B3** Sustained heart rate  $\geq$  120 (with radial pulse) and BP  $\geq$  90 systolic
- B4** Best Motor Response = 5
- B5** Pregnancy > 20 weeks
- B6** Fracture to humerus or femur due to Motor Vehicle Crash
- B7** Fall from  $\geq$  20 feet
- B8** Age  $\geq$  55
- B9** Ejection from vehicle (excludes open vehicles)
- B10** Driver with deformed steering wheel or intrusion > 12 inches to occupant or 18 inches at any site
- B11** Death in same vehicle
- B12** Auto vs. Pedestrian/bicyclist/motorcyclist thrown, run over, or with significant (> 20 mph) impact
- B13** Patient on anticoagulation with a suspected T.B.I.

\* Paramedic intuition may serve as a Red / Blue Criteria override.

#### Pediatric Trauma Patient Evacuation Considerations

Choose all that apply

##### ONE OR MORE RED CRITERIA

- R1** Patient not "awake and appropriate"
- R2** ACTIVE airway assistance required (i.e., more than supplemental O<sub>2</sub> without airway adjunct)
- R3** Weak carotid/femoral pulse or Absent distal pulses
- R4** Degloving injury, major flap avulsion
- R5** Acute Paralysis, loss of sensation, or suspected spinal cord injury
- R6** Amputation proximal to wrist or ankle
- R7**  $\geq$  10% TBSA 2<sup>nd</sup>/3<sup>rd</sup> degree burns
- R8** Penetrating injury to head (or depressed skull fracture), neck, torso, extremities proximal to elbow or knee, excluding superficial wounds
- R9** Crushed, mangled, or pulseless injured extremity
- R10** 2 or more closed long bone fracture sites
- R11** Any open long bone fracture
- R12** Pelvic fracture or flail chest

##### TWO OR MORE BLUE CRITERIA

- B1** Reliable history of any LOC and/or Amnesia
- B2** Weight < 10Kg (<22 lbs.) or RED or PURPLE Broselow Tape Zone
- B3** Single closed long bone fracture site
- B4** Ejection from vehicle (excludes open vehicles)
- B5** Death in the same vehicle
- B6** Falls > 2x the child's height or > 10 feet
- B7** Auto vs. Pedestrian/bicyclist/motorcyclist thrown, run over, or with significant (> 20 mph) impact
- B8** Pregnancy > 20 weeks
- B9** Intrusion > 12 inches to occupant or 18 inches at any site

\* Paramedic intuition may serve as a Red / Blue Criteria override.

*Golden Crescent Regional Advisory Council  
TSA-S  
Air Medical Transport Criteria*

*Medical Patient Evacuation Considerations*

The following patients may be deemed appropriate for Air Medical Transport, based on transport times and resources available by Ground EMS Providers:

STEMI with signs/symptoms of cardiogenic shock.

CVA/Stroke patient that may require transport to appropriate center and ground transport would be significantly longer than Air Medical Transport.

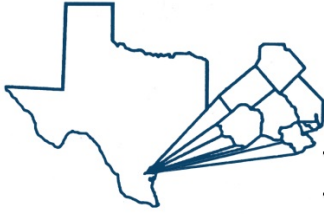
Altered Mental Status with potential for airway compromise.



TRAUMA SERVICE AREA-S  
GOLDEN CRESCENT REGIONAL ADVISORY COUNCIL

## **EMS Blood Collection Process Test**

- \_\_\_\_\_ 1. T or F: Patients who maybe experiencing Sepsis, Stroke, STEMI/Non-STEMI, or Trauma are the patients that would benefit from EMS performing a pre-hospital blood draw on.
- \_\_\_\_\_ 2. T or F: If a medic feels like it would benefit the patient to have a pre-hospital EMS blood draw then he or she can make that decision.
- \_\_\_\_\_ 3. T or F: Lab results being available quicker to the ED physicians, faster decisions for treatment options, and improving ED throughput are a few of the benefits to pre-hospital blood draws from EMS.
- \_\_\_\_\_ 4. T or F: There is no particular order to be used when filling the lab tubes as long as they are full upon delivery to the ED.
- \_\_\_\_\_ 5. T or F: DeTar and Citizens have different lab collection bags, different procedures and different rules for collecting a pre-hospital blood draw.
- \_\_\_\_\_ 6. T or F: The lab tube numbers on the label must match the specimen bag number and have the patient's name, DOB, and the time and date the lab was collected before handing it off to the hospital staff or the blood will be discarded and the patient will be redrawn at the hospital.
- \_\_\_\_\_ 7. T or F: EMS medics must vigorously shake the blood in the tubes after blood is drawn to make sure the blood is mixed thoroughly.
- \_\_\_\_\_ 8. T or F: The medic will use the saline lock with attached vacutainer for blood collection draws.
- \_\_\_\_\_ 9. T or F: It is okay to place the filled tubes on the dashboard of the ambulance until you arrive at the hospital.
- \_\_\_\_\_ 10. T or F: You can only use the hospital's bag that you are transporting the patient to when collecting a prehospital blood draw.



TRAUMA SERVICE AREA-S  
GOLDEN CRESCENT REGIONAL ADVISORY COUNCIL

# EMS Blood Collection Process

Name: \_\_\_\_\_

Date: \_\_\_\_\_

[ ] EMT-I [ ] EMT-P [ ] Initial [ ] Retest Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_ Elapsed Time: \_\_\_\_\_

**OBJECTIVE:** *Given an adult IV hand or pediatric IV arm manikin, the student will draw an uncontaminated blood sample using an IV saline lock and vacutainer, fill blood tubes, and dispose of contaminated materials.*

**TESTING CONDITIONS:** *Student is instructed to draw a blood sample using an IV saline lock and vacutainer and fill lab tubes in correct order.*

- | Fail or | Pass | * Required criteria and must be completed by candidate in order to pass.                                       |
|---------|------|--|
| 0       | or 2 | 1. Confirm the order to drawing blood samples.   |
| 0       | or 2 | * 2. Identify and communicate with the patient.  |
| 0       | or 2 | 3. Gather and prepare appropriate supplies.  |
| 0       | or 2 | * 4. Do not contaminate supplies or replace contaminated supplies prior to use.                                |
| 0       | or 2 | * 5. Prime saline lock and inspect the IV cathalon and needle.   |
| 0       | or 2 | * 6. Don universal precautions before attempting IV insertion or venipuncture.                                 |
| 0       | or 2 | 7. Apply a constricting band and check distal circulation.   |
| 0       | or 2 | * 8. Select and cleanse site distal to constricting band.  |
| 0       | or 2 | * 9. Perform IV insertion or venipuncture with bevel of needle up.   |
| 0       | or 2 | * 10. Attach <b>primed</b> saline lock with vacutainer and stabilize the IV cathalon                           |
| 0       | or 2 | * 11. Secure IV site.  |
| 0       | or 2 | * 12. Insert tubes into vacutainer (0-4 in order)  |
| 0       | or 2 | * 13. Fill appropriately, disconnect and rock the container.   |
| 0       | or 2 | * 14. Remove constricting band, disconnect vacutainer, and flush saline lock.                                  |
| 0       | or 2 | * 15. Dispose of contaminated materials and place sharps in sharps container.                                  |
| 0       | or 2 | * 16. Label bag with patient's name, DOB, date and time of sample.<br>Confirm tube numbers correlate with bag. |

\_\_\_\_\_ Total Points(min. 26) Outcome: \_\_\_ Pass \_\_\_ Fail

Comments: \_\_\_\_\_

Examiner Name(print): \_\_\_\_\_ Examiner Signature: \_\_\_\_\_

## Appendix 2B: Injury Prevention Forms

\*Page left intentionally blank; forms below\*

# GCRAC INJURY PREVENTION PROGRAM EVALUATION FORM

Program: \_\_\_\_\_

Date: \_\_\_\_\_ Presenter's Name: \_\_\_\_\_

Your name (optional): \_\_\_\_\_

Please indicate your level of satisfaction with each of the following by circling the appropriate response.:

Program met my expectations	EXCELLENT	GOOD	FAIR	POOR	N/A
Program content	EXCELLENT	GOOD	FAIR	POOR	N/A
Ability of presenter to communicate content	EXCELLENT	GOOD	FAIR	POOR	N/A
Content and usefulness of materials	EXCELLENT	GOOD	FAIR	POOR	N/A
Convenience of the program day and time	EXCELLENT	GOOD	FAIR	POOR	N/A
Area in which the program was held	EXCELLENT	GOOD	FAIR	POOR	N/A
Overall, how would you rate this program	EXCELLENT	GOOD	FAIR	POOR	N/A

If you answered "poor" or "fair" to any of the above please indicate your reasons:

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How did you hear about this program?: \_\_\_\_\_

Would you recommend this program to your friends and family? \_\_\_\_\_

What changes, if any, would you recommend for this program?

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Do you have any suggestions for future programs?

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**Thank you for your feedback!**

**Appendix 2C: Golden Crescent Medical Operations Center Forms**

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## Golden Crescent Medical Operations Center (GCMOC) Activation Algorithm

The principle guiding a GCMOC activation is whether an event presents challenges to the city/county/region that would require coordination and support to address health and medical care issues.

Can be Activated by:

- 1.) GCRAC Director / RAC Chair
- 2.) Regional Emergency Management Coordinator
- 3.) Any Hospital CEO or designee
- 4.) COV or Region 8 Public Health Director / Public Health Authority



Hospital Command Center (HCC) Activation Steps for Communications:

- 1.) Log onto WebEOC, and Activate the following boards:
  - a. Significant Events
  - b. Medical Events
  - c. EOC / Command Post Activation Status
- 2.) Turn on, and be prepared for radio checks on the following devices:
  - a. VHF/MA mHZ
  - b. MSAT phone
  - c. HAM radio
  - d. Facility polycom conference phones (if applicable)
- 3.) Document success of each device after the radio check in the Incident Significant Events board on WebEOC

Requests to activate may come from hospital emergency management personnel, regional Emergency Operation Center, State Medical Operation Center, and others; however, the following algorithm was developed by the Hospital Planning Group to ensure continuity of operations. Requestors must submit their request to activate the GCMOC to one of the people listed below. This can usually be done through a phone call.



## Golden Crescent Medical Operations Center (GCMOC) Levels of Activation

### Level 4 – Normal Operations

- Daily Operations Center
- Monitoring Local / Regional / State / Federal Significant Events
- FYI / Situational Reports as necessary

### Level 3 – Increased Readiness (Virtual)

An identified Significant Regional / State event that may affect regional healthcare operations

- Status notifications to RMOC / HPG groups based on event
- WebEOC Event created
- Significant events boards utilized as needed
- Regional communication check conducted via WebEOC and MSAT checks
- Supply check – 96 hour plan activated
- Identify GCRMOC support staff
- OPS briefings may occur based on event to promote situational awareness
- Stakeholders providing intel to/from Hospital Command / Leadership

### Level 2 – Partial Activation / Escalated Response Conditions (Virtual/Physical)

Significant regional/state threat/event that is imminent or impacting some or all healthcare systems. Event will possibly require limited external partner coordination and initial response activities are anticipated to be limited to 1 operational period or less.

- Affected stakeholders engaged based on event
- GCRMOC staff identified and contacted based on response needed
- GCRMOC Director on site
- Scheduled OPS briefings per operational period
- Update maps, charts, resource data

### Level 1 – Full Activation / Emergency Response Conditions (Physical)

Significant regional/state/federal event that will impact the healthcare system. Event requires expansive response/recovery coordination with external partners and initial response coordination/recovery is anticipated to be greater than one operational period.

- 24/7 Operations
- GCRMOC staff on site
- Scheduled OPS briefings per operational period