The Next Meeting of PMAC is on:
Monday, January 22, 2018
9:00 AM to 10:30 AM
The Towers of Riverwalk
4210 Riverwalk Parkway, Riverside
First Floor Conference Rooms

1. **CALL TO ORDER & HOUSEKEEPING (3 Minutes)**
   Misty Plumley

2. **PLEDGE OF ALLEGIANCE (1 Minute)**
   Zeke Foster, MD (Chair)

3. **ROUNDTABLE INTRODUCTIONS (5 Minutes)**
   Zeke Foster, MD (Chair)

4. **APPROVAL OF MINUTES (3 Minutes)**
   July 24, 2017 Minutes— Zeke Foster, MD (Attachment A)

5. **STANDING REPORTS**
   5.1. Trauma System—Shanna Kissel (Attachment B)
   5.2. Stroke System— Dan Sitar (Attachment C)
   5.3. STEMI System— Dan Sitar (Attachment D)

6. **Other Reports**
   6.1. EMCC Report—Kristen Clements

7. **DISCUSSION ITEMS, UNFINISHED & NEW BUSINESS (60 Minutes)**
   7.1. Ketamine Trial Study—Dr. Vaezazizi
   7.2. CQI Update – Lisa Madrid (Attachment E)
   7.3. Upcoming P&P Manual Changes / PUC – Misty Plumley (Attachment F)
   7.4. SWAT-T Tourniquet – Bret Offut Corona FD (Attachment G)
   7.5. PMAC Meeting Schedule 2018 – Misty Plumley (Attachment H)

8. **REQUEST FOR DISCUSSIONS**
   Members can request that items be placed on the agenda for discussion at the following PMAC meeting. References to studies, presentations and supporting literature must be submitted to REMSA three weeks prior to the next PMAC meeting to allow ample time for preparation, distribution and review among committee members and other interested parties.
Loma Linda University Med. Center Murrieta
1-Kevin Flaig, MD
4-Mike Staylor

Menifee Valley Medical Center
1-Todd Hanna, MD
4-Janny Nelsen

Kaiser Permanente Moreno Valley
1-George Salameh, MD
4-Katherine Heichel-Casas

Palo Verde Hospital
1-David Sincavage, MD
4-Camelita Aquines

Parkview Community Hospital
1-Chad Clark, MD
4-Guilean Estrada

Rancho Springs Medical Center
1-Zeke Foster, MD (Chair)
4-Sarah Young

Riverside Community Hospital
1-Stephen Patterson, MD
4-Sabrina Yamashiro

Riverside County Fire Department
5-Scott Visyak
8-Tim Buckley

Riverside County Police Association
7-Sean Hadden

Riverside University Health System Med. Center
1-Melanie Randall, MD
4-Kay Schulz

San Gorgonio Memorial Medical Center
1-Richard Preci, MD
4-Trish Ritarita

Temecula Valley Hospital
1-Pranav Kachhi, MD
4-Jaquelynn Ramirez

Trauma Audit Comm. & Trauma Program Managers
2-Frank Ercoli, MD
3-Shane McMurphy

Ex-officio Members:
1-Cameron Kaiser, MD, Public Health Officer
2-Reza Vaezzazizi, MD, REMSA Medical Director
3-Bruce Barton, REMSA Director
4-Keven Porter, Hospital Association of Southern California
5-Jeff Grange, MD, LLUMC
6-Phong Nguyen, MD, Redlands Community Hospital
7-Rodney Borger, MD, Arrowhead Regional Medical Center

9. **ANNOUNCEMENTS (15 Minutes)**
   This is the time/place in which committee members and non-committee members can speak on items not on the agenda but within the purview of PMAC. Each announcement should be limited to two minutes unless extended by the PMAC Chairperson.

10. **NEXT MEETING / ADJOURNMENT (1 Minute)**
    January 22, 2018—4210 Riverwalk Parkway First Floor Conference Rooms

Members are requested to please sit at the table with name plates in order to identify members for an accurate count of votes.

Please come prepared to discuss the agenda items. If you have any questions or comments, call or email Misty Plumley at (951) 201-4705 / mplumley@rivco.org. PMAC Agendas with attachments are available at: [www.rivcoems.org](http://www.rivcoems.org). Meeting minutes are audio recorded to facilitate dictation for minutes.
<table>
<thead>
<tr>
<th>TOPIC</th>
<th>DISCUSSION</th>
<th>ACTION</th>
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<tbody>
<tr>
<td>1. CALL TO ORDER</td>
<td>Brian MacGavin called the meeting to order at 9:00 AM and presented housekeeping items before turning the meeting over to PMAC Chair Dr. Zeke Foster.</td>
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<tr>
<td>2. PLEDGE OF ALLEGIANCE</td>
<td>Dr. Zeke Foster led the Pledge of Allegiance.</td>
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<tr>
<td>3. ROUNDTABLE INTRODUCTIONS</td>
<td>Self-introductions were facilitated by Dr. Zeke Foster.</td>
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<td>4. APPROVAL OF MINUTES</td>
<td>The April 17, 2017 PMAC meeting minutes were approved with no changes.</td>
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<td>5. STANDING REPORTS</td>
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<tr>
<td>5.1 Trauma System</td>
<td>Since July 6, 2017, seven additional patients have received prehospital TXA for a total of 153 since the beginning of the trial study. Forty-three patients met criteria but did not receive prehospital TXA. Twenty-six patients received TXA, but did not meet inclusion criteria. Dr. Vaezazizi announce that it is incredibly important to adhere tightly to the inclusion criteria for TXA use. This is very important for the integrity of the trial study and ensuring that paramedics are not practicing outside of their scope of practice.</td>
<td>Information only.</td>
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<td>Shanna Kissel</td>
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<td>5.2 Stroke System</td>
<td>Stroke diversions are being monitored by REMSA and reported at the stroke system meetings. REMSA has contracted with Dan Sitar to work on the re-alignment of our stroke and STEMI programs. Stroke regulations were approved by the State EMS Commission on June 21, 2017. REMSA will review the final draft and realign our stroke program with the new regulations. The next stroke meeting will be held in the Orange room at 4210 Riverwalk Parkway on August 17, 2017 from 1:00 to 3:00 PM.</td>
<td>Information only.</td>
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<td>Shanna Kissel</td>
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<tr>
<td>5.3 STEMI System</td>
<td>STEMI regulations were approved by the State EMS Commission on June 21, 2017. REMSA will review the final draft and realign the STEMI program with these new regulations. The next STEMI meetings will be on July 20, 2017 and October 19, 2017 at REMSA from 10:00 AM to 12:00 PM in the Orange room.</td>
<td>Information only.</td>
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<tr>
<td>Shanna Kissel</td>
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### 5.4 MCI Workgroup Update
**Dan Bates**

Information was received from the stakeholders and a comprehensive scope of work was developed and forwarded to County Purchasing for processing. A Request for Proposals (RFP) was developed by REMSA staff and published on the Public Purchase website with assistance from County Purchasing. One proposal was submitted and evaluated. The proposal met all criteria as identified in the RFP and is on the Riverside County Board of Supervisors’ August 25 agenda. A kick-off meeting to discuss the performance period and the deliverables will be scheduled once the contract is awarded.

**Information only.**

### 6.0 Other Reports

#### 6.1 EMCC Report
**Kristen Clements**

The EMCC re-elected Stan Grube as their Chair. The EMS system strategic plan update workshops were discussed along with Emergency Management Department changes.

Bruce Barton added that the 2017 EMS plan went out for a two week comment period which closes on Friday, July 28, 2017. Once written comments are received and reviewed it will be finalized. REMSA will meet with county counsel to determine if we need to present it to the Riverside County Board of Supervisors.

**Information only.**

### 7. Discussion Items, Unfinished & New Business

#### 7.1 REMSA Staffing
**Bruce Barton**

REMSA is now fully staffed with Henry Olsen and Ralph Serrano newly hired as EMS Specialist. Misty Plumley was promoted to Senior EMS Specialist. The redesign of specialty care programs and the multi-patient management plan are projects REMSA will be moving forward-on.

**Information only.**

#### 7.2 Trial Studies
**Dr. Vaezazizi**

The TXA trial study is part of a statewide trial study that is in its second 18 month period. Challenges in the trial include inclusions criteria and the proper use of protocol. TXA can continue to be given without specific EMSA approval once the trial ends.

Additional trial studies may come in the near future. However, trial studies are labor intensive for REMSA and EMS providers and

**Information only.**
we need to discuss the ability to do additional studies at the same time. One recent study proposal of particular interest the administration of ketamine in lieu of fentanyl or morphine. Because ketamine is not in the scope of practice for paramedics in California the only way it could be administered in the prehospital setting would be through a trial study. We need to ensure we have good data collection in place before moving forward with this study. The trial study is not intended to study the efficacy of Ketamine but to study its safe application in the prehospital environment.

7.3 Resuscitation Opportunities In Riverside
Dr. Davis gave a presentation from a remote location using Webex. He proposed using the Advanced Resuscitation Training (ART) program and Impedance Threshold Devices (ITDs) within selected areas of Riverside County Fire Department’s response jurisdiction. There was comments made that the focus on improved CPR was likely the reason for improved outcomes rather than the use of the ITDs. Dr. Vaezazizi stated he is willing to allow for a closely monitored and limited deployment of this program in Riverside County but he wanted to hear from PMAC before he makes a decision. There was further discussion on some of the concerns in implementing this proposal.

8. Request for Discussions
Brian MacGavin explained that this is a new agenda item which allows for PMAC members to request for discussion and presentation items to be place on the agenda for the following PMAC meeting. References to studies, presentations and supporting literature must be submitted to REMSA three weeks prior to the next PMAC meeting to allow ample time for the preparation of materials and the distribution to PMAC members and interested parties. Additionally, this will allow them time to review materials prior to the next PMAC meeting.

9. Announcements
Misty Plumley announced that epinephrine for anaphylaxis, narcan administration and the use of a finger stick blood glucose monitor has been added to the EMT’s scope.
| of practice--amended in the State of California Title 22 Division 9, Chapter 2. Emergency Medical Technician Training programs providing Skill Competency Verifications (SCV) need to ensure this change is reflected on any SCV form submitted to REMSA. EMS training provider agencies have until July 1, 2018 to modify their training curriculums. And, EMS provider employers have until the first recertification period after July 1, 2019 to ensure all of their EMTs are trained on the aforementioned items. There is also an optional scope of practice that allows for using multi-dose containers to be used. Please let REMSA know as soon as possible if your organization plans to pursue this option. 

Riverside Community Hospital will be hosting a half-day specialty care conference on August 15, 2017 at. Flyers are available on the sign-in table. 

RCC Paramedic class 18 will be graduating on September 16, 2017 at 10:00 AM at the Moreno Valley Conference Center. 

Ethan Able brought up a recent case involving an issue with a helicopter response. He was asked to submit his request to Shanna Kissel for a HEMS CQI case review. 

Erin Malone, Program Coordinator, from Public Health Injury Prevention introduced herself. She said they are now tracking e-outcomes using ImageTrend Elite for water submersion incidents. They are still working on attaining hospital outcome data for submersion incidents. 

Phil Rawlings announced that, as of July 17, 2017, Riverside County Fire Department in conjunction with AMR, are now responding without lights and sirens to lower acuity medical requests (MPDS Alpha and Omega determents) using EMD protocols. He stated that this should make the roads and highways |
**PMAC Minutes**  
**July 24, 2017**

| safe and encouraged other EMS responder organizations to do the same.  
Dr. Vaezazizi announce that the NTSB recently published a white paper regarding the overuse of lights and sirens by EMS vehicles. He believes a majority of EMS responses in Riverside County do not require lights and sirens and encouraged further continued progress in reducing the unnecessary use of lights and sirens.  
Bruce Barton announce that the national EMS memorial bike ride will take place on the west coast between September 25 and 30th 2017. Further information can be obtained online.  
10. **Next Meeting/Adjournment**  
October 23, 2017  
4210 Riverwalk Parkway First Floor Conference Rooms.  
Information only. |
DATE: October 23, 2017

TO: PMAC

FROM: Shanna Kissel, Assistant Nurse Manager

SUBJECT: Trauma System

1. TXA trial study update as of 9/29/17:
   - 183 appropriate administrations
   - 63 patients that met criteria but did not get TXA (missed)
   - 29 patients that received TXA, but did not meet inclusion criteria (fallouts)

   2018 PUC training will include TXA education.

2. ACS Consults/verifications

   RCH and DRMC went through consultation visits early in the year. RUHS successfully passed their re-verification for Level II Trauma center.

   ACTION: PMAC should be prepared to receive the information and provide feedback to REMSA.
Date: September 30, 2017

TO: PMAC

FROM: Dan Sitar, Specialty Care Consultant, RN

SUBJECT: Stroke System

1. State Stroke regulations were approved by the State EMS Commission on June 21, 2017, but have yet to be released for final publication.

2. Stroke system re-alignment will begin with a gap analysis based on the final published version of the State regulations.

3. Anticipated areas of re-alignment include:
   a. Initiation of a Stroke registry (Image Trend)
   b. Uniform collection of Stroke data by EMS providers and hospitals
   c. Selection of a qualitative and quantitative stroke scale
   d. Utilization of thrombectomy-capable Stroke centers
   e. Creation of a Stroke case review committee

4. The next stroke meeting will be held in the Orange room at 4210 Riverwalk Parkway on November 16, 2017 from 1:00 to 3:00 PM.

Action: PMAC should be prepared to receive the information and provide feedback to the EMS Agency
Date: September 30, 2017

TO: PMAC

FROM: Dan Sitar, Specialty Care Consultant, RN

SUBJECT: STEMI System

1. State STEMI regulations were approved by the State EMS Commission on June 21, 2017, but have yet to be released for final publication.

2. Re-alignment of the STEMI program will take place beginning with a gap analysis based on the final published regulations. Anticipated areas that will require re-aligning include:
   a. Initiation of a STEMI registry (Image Trend)
   b. Clean data collection from EMS providers and hospitals
   c. Utilization of CARES registry data for system improvement purposes
   d. Creation of a STEMI case review committee

3. The next STEMI meetings will be on October 19, 2017 at REMSA from 10:00 AM to 12:00 PM in the Orange room.

ACTION: PMAC should be prepared to receive the information and provide feedback to the EMS Agency.
DATE: October 2, 2017

TO: PMAC

FROM: Lisa Madrid, EMS Specialist

SUBJECT: CQI Update

CQILT identified the need to focus on the input of information into Image Trend. A data collection project was started to focus on Primary Impression. The county as a whole was entering 25% of their Primary Impression as a Not Value. Since this project started and the providers have been providing further education on the importance of entering a correct Primary Impression. From July 28, 2017 – September 22, 2017 the Not value Input has decreased from 25% to 15%. There are some providers that have zero of their calls with a not value. Others have a lot of work to do still. Every week each provider is making progress. This is just one field. As time goes on we will eventually focus on all fields, and the importance of each of them.

REMSA completed and submitted the annual CQI plan update to EMSA.

The PLN’s have been working on a data collection project for Needle decompression. The results and graph will be attached. CQILT will discuss this during the October 12th meeting. If any action items result we will discuss at PMAC.

ACTION: Information sharing only.
DATE: October 1, 2017

TO: PMAC

FROM: Misty Plumley, Senior EMS Specialist

SUBJECT: Proposed Policy Changes

Proposed policy changes for 2018 have been compiled and will include:

- Added policies for Title 22, Division 9, Chapter 1.5 Public Safety First Aid and CPR: including updates to the scope of practice, Training Programs for this level of training.
- Updates to REMSA 3304
- Changes to REMSA 7301 Pediatric Orotracheal Intubation to align with the CA EMS Authority’s decision regarding this scope of practice item.
- Updates to the REMSA 5102
- Creation of REMSA 3308 to allow for authorized Public Safety Personnel to administer intranasal naloxone.
- Updates to the CQI system policies


ACTION: Information sharing, PMAC action to move proposed policy changes to stakeholder comment phase.
Date: September 15, 2017

TO: PMAC

FROM: Bret Offutt, Fire Captain/Paramedic/EMS Officers, Corona Fire Department

SUBJECT: SWAT-T Tourniquet

Bret Offutt submitted a request to present information about the SWAT-T tourniquet to have this piece of equipment added to the REMSA Drug and Equipment List. This information will be presented to PMAC for consideration and then voting action on the request to add this piece of optional equipment.

ACTION: PMAC should be prepared to receive the information and provide feedback to the EMS Agency.
What is the SWAT-T?

- Stretch, Wrap, And Tuck Tourniquet
- Multi-purpose elastic band
- Easy to use with little training

Advantage of the SWAT-T

- Easy and fast to apply
- Will constrict when muscles relax
- Less chance of loosening with movement
Advantage of the SWAT-T

- Less chance of being knocked loose
- Higher axillary and groin applications

Advantage of the SWAT-T

- Wide band decreases tissue damage
  - Better occlusion at lower pressures
- Usable on all limb sizes
  - Effective on pediatric limbs where the CAT is not

Advantage of the SWAT-T

- Multiple uses
  - Tourniquet
  - Pressure dressing
  - Can be cut and used as an occlusive dressing
  - Can be used as an elastic wrap for sprains or splinting
- Cheap
  - One third the cost of a CAT Tourniquet
Documented usage
High Axillary Application

May 2009: Documented save on axillary wound too high for effective windlass application.
White Male falls through glass table, severing brachial/axillary artery.
EMS arrives at Trauma Center with critically ill pt actively hemorrhaging.
Bleeding continues through failed pressure dressing.
Trauma team attempts to apply a blood pressure cuff for tourniquet, but this fails due to proximity of wound to axilla/shoulder.
SWAT-T™ handed to trauma surgery resident physician (not previously familiar with the device).
Saphenous vein graft and repair in the operating room.
[2016 - to date, 3 successful SWAT-T applications after windlass failures in the high axillary region]

Documented usage
Pediatric Application

September 2012, Oakland, CA - Officers respond to school and find a male child stabbed in the right arm.
"We found obvious arterial bleeding (inner upper arm), as other officers continued looking for the suspect." The first officer on scene attempted windlass TQ. After a couple of minutes stopped trying it - due to inability to secure the tourniquet. The bar would not seat in the locking mechanism due to the curve caused by this 10 year old's arm.
"The child was in significant pain, still bleeding, and the bar could not be secured."
Fortunately, one of the other officers also carried a SWAT-T. Held direct pressure on the wound, quickly applied the SWAT-T just above the injury. The bleeding stopped, the child tolerated the tourniquet and was handed over to EMS a short time later. - JM
FIELD REPORTS

August 2017: Documented save.

“...over 500 volunteer medics in Venezuela have been trained and equipped with Swat-T. These medics have saved many lives, and the picture of the wounded patient is one of the most recent saves, the hemorrhage was successfully stopped with a swat-tourniquet and on arrival to the operating room was found to have a partial injury to the left iliac artery. It was noted that the patient would have died in minutes without the tourniquet.” - DI/CY

June 2017:
Built around the unfortunate events of August 5th, 2015 in which Officer Thomas LaValley was ambushed and shot several times, the Shreveport Police Department took action to help prevent unnecessary death from treatable bleeding injuries. Below is a poster that was presented recently at #SOMA2017 highlighting the success of this program.

This action was led by a community of folks in and around the City of Shreveport, Louisiana with the help of organizations like Blue Forever Inc and First Chance to assist in raising money and procuring affordable and effective trauma kits for local officers.

Collectively these actions have led to significant trauma kit and tourniquet usage in the Shreveport community and have allowed effective treatment and life-saving care to not only local law enforcement, but also the citizens of Shreveport, LA, Caddo Parish as well as surrounding communities.

SWAT-T is proud to be part of the effort to reduce deaths from treatable life-threatening hemorrhage. This poster and initiative shed light on the criticality of access to this life-saving gear, and the importance of community partnerships with law enforcement, as well as, not for profits to ensure that every single officer has the kit and training that are required to intervene in a crisis such as life-threatening hemorrhage from trauma.

Thanks to America Craig for helping to lead this charge and bringing SWAT-T into the fold in southern Louisiana. We look forward to continuing to help protect your citizens and officers alike!

May 2017: Documented save.

Afghanistan injured ANA troop from IED blast. Treatment during MEDEVAC. The injury was too high in the axilla for the standard windlass tourniquet so we used the SWAT-T. It worked great and completely controlled the bleeding. - KB, 160th SOAR.

March 2017: Documented save.

Used one of these for the first time the other night on a suicidal male who had cut his wrist and throat. The swat-t worked great on the second wrap bleeding was controlled. There was a significant arterial bleed. Clothing was saturated with blood. The patient was barely able to stand, and I would say he lost 1 to 2 liters of blood. The SWAT-T controlled the bleed perfectly. By the time medics arrived I had the patient packaged and all they did was walked and took an assessment from me then it was a load and go. I have used both the swat-t and a CAT before and both are great I like the SWAT-T because it takes up less room on my gun belt. - RD
FIELD REPORTS continued

March 2017: Documented save.

I received TEMS training a year ago. We were introduced to the SWAT at this time and we purchased them for personal use.

Z and another coworker, Reed, were out cutting trees three weeks ago. They were cutting limbs from fallen trees when a tree shifted and pushed the chainsaw into Reed’s leg, above the knee. Reed told Z that he cut himself and began to apply direct pressure. Z grabbed his medical supplies and assessed Reed’s condition. Reed missed his arteries and veins, but he had a huge, gaping wound. Z packed the wound and used the SWAT to provide compression.

It took 6 hours to get to the hospital, due to the remote location. Reed went into surgery and he should heal fine.

We were all happy that, not only was Z there, but he had recent training and the right equipment. He is actually going to buy several more SWAT-Ts, so he can keep them on his person. He said that the 30 yards through the snow to get his supplies was the longest distance he had ever run.

- IL - Alaska

November 2016: Documented save.

The victim was shot 7 times. Once was up near his femoral artery. This is where they used the SWAT-T to tie off the bleeding.

March 2017: Documented save.

Just had another patient with the perfect TQ/pressure dressing applied to a lower leg through and through Gunshot wound. I complimented the medics: was the right choice for this bleeding wound. -SV

November 2016: Pressure Dressing.

The patient was male approx late thirties to mid-forties and showed signs of being intoxicated. He was traveling on his motorbike/scooter when he slipped on the road and suffered severe lacerations to his face arms and thighs due to the fact that he was only wearing a T-shirt and shorts. Luckily he had a helmet.

The wound on his thigh was due to his motorbike’s step-nut creating a gash on his left upper thigh which was approximately 4-5 inches long and around 1-1 1/2 inches deep exposing the muscle and bones. Luckily it didn’t hit any major artery (femoral) but was nonetheless was very heavily bleeding.

I happened to witness the accident and rush over to offer help. I used some heavy gauze pads and your SWAT-T as a pressure dressing to stop the bleeding, after a short while, the local rescue unit came and took the patient to the nearest hospital. -Benedict de Borja Firefighter/Medic
October 2016: Documented save.
I just wanted to thank the employees at SWAT-T for manufacturing an outstanding product that saves lives. I am a police officer in California and due to my background as a paramedic, I help teach first aid for the department. A major part of the first aid class is trauma/hemorrhage control. Due to the SWAT-T’s multiple uses, I spend extra time instructing officers how to use the SWAT-T effectively as both a tourniquet and as a direct pressure device. One of our detectives has found a few different methods to use it for hemorrhage control in areas a conventional tourniquet would not be able to reach. I try to convince every officer that they should always have at least one SWAT-T on hand or available as I think they should be standard issued medical devices for all police officers. I inform them that the for the price of one CAT tourniquet, you can buy two-three SWAT-T’s.

I recently responded to a call for service for a subject who suffered from a self inflicted laceration down his left forearm, causing an arterial bleed. It was a text book arterial bleed with bright red blood spurting with every heart beat. As my partner applied direct pressure to the large wound, I applied my SWAT-T above the injury and was able to control the bleeding with ease. Our local ambulance company and fire department were not all familiar with the SWAT-T and were amazed at how effective it was in controlling this subject’s bleeding. -Logan Holmes

August 2016: Documented save.
SWAT-T is a wonderful life-saver. I used this versatile tool several times in austere environments and it really works. Here on a picture taken last week in Mali, the victim has been hit by a truck and the leg has passed under the truck’s tyre. Popliteal artery was cut by the broken tibia and resulted in massive bleeding. SWAT-T controlled the hemorrhage in a few seconds. I also used on pediatric patients and it was useful. I have the feeling that it causes less pain than other TQs and is better tolerated.

For sure a must-have! -SS

August 18, 2016: Documented save.
...we had another SWAT-T save yesterday. Same PD we issued kits to and taught, our old hometown PD, Lafayette, CO.

Motorcycle vs car. Total amputation below knee. It’s the second time they’ve used one.

Thanks for the awesome product! -DS - Dark Angel Medical

August 2016: Pressure Dressing.
The day you were here, you left with us a few of the SWAT Tourniquets. Our Division Chief in charge of equipment gave me one to try out when it may be needed.

Well, that day came earlier this week (late August 2016).

We responded to a bleeding call, hemorrhage from a AV fistula. The patient attempted to control the bleed on her own but by the time we arrived it was still very actively bleeding and...a lot of blood was being lost. I kept that Tourniquet in my brush pants pocket this whole time along with my personal Tourniquet and decided this was the right time to use it.

I love it! I didn’t have to completely tighten it down as a Tourniquet, but it was very effective as a pressure bandage.

I remember you saying that these Tourniquets were pretty inexpensive.

I think its great.
July 2016: Documented saves.

After Windlass Failure, EMS Save Two Minors With SWAT-T On The Same Night

...the paramedic attempted to deploy his department issued windlass tourniquet without success. It was determined that the patient’s arm size was too small to accommodate the tourniquet. A responding officer offered his SWAT-T tourniquet to the paramedic which was applied immediately with complete resolution of the bleeding.

Police and EMS responded to a call for a young male patient with an arm injury from a broken window and heavy bleeding. On arrival, the medic found a male patient with a laceration to the left lower arm. The patient’s mother, a practicing nurse, had improvised a tourniquet with a plastic bag. A large amount of blood was noted at the scene and the family reported pulsatile bleeding from the wound. During the assessment, the responding paramedic removed the plastic bag and experienced an immediate return of pulsating blood flow from the area of the left radial artery. At this point, the paramedic attempted to deploy his department issued windlass tourniquet without success. It was determined that the patient’s arm size was too small to accommodate the tourniquet. A responding officer offered his SWAT-T tourniquet to the paramedic which was applied immediately with complete resolution of the bleeding. The patient was transported, treated at a local hospital and released without further incident.

Following this call, law enforcement responded to another call for a female pediatric patient with an injury to the left arm and massive bleeding secondary to breaking a window in her home. On arrival, law enforcement found a young female patient unresponsive in the hallway in a pool of bright red blood. The responding officer noted copious gross blood throughout the scene. The amount of the blood contamination was so significant that it compromised the officers’ ability to access and initiate care to the patient. A significant wound was identified to the left elbow area of the patient, direct pressure was applied to the injury and the patient’s legs were elevated. The responding paramedic, who had successfully treated the earlier patient, opted to apply a SWAT tourniquet instead of his issued windlass tourniquet because of his previous pediatric patient experience. The responding officer immediately deployed his SWAT-T from his BTK (belt trauma kit) and provided it to the treating medic. The medic was able to successfully apply the tourniquet and initiate an IV. The patient began regaining some responsiveness at this point and was transported to the ED where she was treated successfully.

This EMS agency, which is located in the North Eastern U.S., trains heavily in TECC and TCCC techniques and protocol. The responding medic actively participates with law enforcement locally as a tactical paramedic and is well versed in tourniquet use and bleeding control. Prior to these experiences, the medic and EMS agency held the opinion that their windlass tourniquet system was sufficient to treat their patient populations. One call changed all of that. Because of this patient interaction, the entire agency and region are rethinking their approach to civilian bleeding control and what equipment will be mandatory for their local first responders’, EMS and police. Thanks to this collaboration between the police and medics, the often overlooked, but detrimental issue of windlass tourniquet sizing in pediatric populations came rapidly to light in a way that had a positive outcome for both the patient and the future of bleeding response in their region. These events changed the paradigm of thinking surrounding the commonly accepted assumptions that windlass tourniquets are a one size fits all solution and proved that the SWAT-T is an indispensable part of a police officer or paramedics kit.

July 2016: Multi-purpose.

Awesome product! I used it to stabilize a pediatric patient who suffered a closed wrist fracture after falling while back packing in the back country. We Walked 10+ miles back to car and then I drove 45 minutes to Med center. RNs had never seen a SWAT-T but were impressed none the less. Patient broke both wrist bones and wrist was reset in the ED w/o surgical intervention. I have worked as an EMT, Firefighter, and peace officer investigator for over 20 years. This is hands down the easiest and most versatile piece of gear I’ve ever utilized! Thanks! - AN
FIELD REPORTS continued

May 16, 2016: Documented save.

“Just wanted to thank you guys again. Had a time last night and again product did its job. This is a 3 inch by 2 inch deep laceration to left leg that a swat-t was used as pressure bandage and worked. Was heavy bleeding and by the time we got to er bleeding stopped.” - J.W.

April 7, 2016: Independent testing.

“Thanks for sending the SWAT-Ts for Testing and Evaluation. “I have had the chance to use them in training with my EMT students and they are by no means easy with anything. I asked for their unbiased opinions on the SWAT-Ts. 90% of all my classes prefer your device over all others. The biggest statement was ease of application and not feeling as “technical” as compared to a CAT or a SOFT T. The guys on my SWAT team also say they like them as well….The students applied dawn dish soap liberally and it held with no slipping. So far I’m convinced this is legit and is currently being carried in my aid bag and personal IFAK.” - SK/FB

April 5, 2016: Documented save.

“We’ve used one, worked well. Reminder to some that quick clot may be needed if the bone is fractured and bleeding from the marrow is part of the problem. -We had two on every provider US Open 2013” - BG/Facebook

February 5, 2016: Multi-purpose.

“I used your product the other night. A machine at my job exploded, leaving a man with shrapnel in his face and arm. After applying a roll of gauze to the arm, I used a SWAT-T to cover the gauze bandage and apply additional pressure. Although I didn’t use it as a tourniquet, it worked wonderfully in applying the pressure needed to stop the bleeding until the paramedics arrived. I need to buy another one, but it was money well spent.” - Hobbs

February 17, 2016: Multi-purpose.

“I introduced some of the guys to the SWAT tourniquet the other day at the range. 2 hours later one of my guys caught some spalling copper jacket in the leg. After disinfecting the wound the bandage would not stick to his leg. Instead of using duct tape, like I normally would, I used the SWAT tourniquet to hold the bandage in place. Great product!” - TS

January 2016: Documented save.

“Reported to TEMS Solutions. US Border Patrol had their second event where a SWAT-T was used effectively in high axillary injury - used after windlass failure.” - PC, Vendor to US Border Patrol
FIELD REPORTS continued

January 2016: Salt Lake City Shooting

“I wanted you and your company to know of a success story that you are welcome to share in your efforts to promote your product.

My name is Officer Athena Walser, I work for the Salt Lake County Sheriff’s Office. My department distributed your SWAT-T tourniquets in our First Aid classes approximately two years ago. We were given a small demonstration on how to use your product, which appeared quick and easy. When I got home I immediately showed my husband who is an Officer with Unified Police Department. (a sister department to the Salt Lake County Sheriff’s Office). I gave my husband a very small demonstration on the ease of use. He jokingly put the SWAT-T in his pants pocket stating that it fit better in his pocket. I laughed it off saying, “I guess I have to buy one for me!”

The following day I went to get ready for work and noticed my SWAT-T was missing. I inquired with my husband, he stated he “acquired it”. I put it off and forgot to buy myself a new one.

Sunday, January 17th 2016 Unified Police Department experienced a HUGE tragedy. Officer Doug Barney was shot and killed in the line of duty. Officer Jon Richey was also shot three times, twice in one leg and once in the other leg. This tragedy was on the same shift as my husband, and both Officers Barney and Richey are my husband’s area partners. My husband responded to the scene where he located Officer Richey. Officer Richey was being attended to and already had one tourniquet on one leg where he was shot twice. Officers began yelling for a second tourniquet so my husband ran over, threw the SWAT-T down and began cutting Officer Richey’s pant leg to his groin where they located the third bullet entry beside his knee. The SWAT-T was applied to Officer Richey’s right leg which helped control the bleeding until medics arrived. Because Officer Richey was in such stable condition, the helicopter was canceled and he was transported by ambulance to the hospital.

Although I was not on scene and could not experience this application myself, I was proud to hear that my SWAT-T tourniquet helped on that horrible day.

I’ve included a link below to provide a little more information on Officer Richey and his condition just two days after being shot three times. http://kutv.com/news/local/injured-officer-jon-richey-on-the-mend.

Thank you for your product, I am a firm believer!

I simply wanted to thank you for a simple and fast product that works! I’ve known both Officers for a few years, and to hear that your tourniquet was fast and caused less pain on a fellow Officer, I was sold! The other tourniquet was a crank style that hurt more than the SWAT-T. (I was informed of that directly by Officer Richey) - Officer Athena Walser, Salt Lake County Sheriff’s Office Salt Lake City, Utah

January 4th, 2016: Documented save.

“I used two SWAT-T’s last night as pressure dressing for Combat Gauze, worked great and the E.D was impressed! We had a LE officer get bit on the calf by a K9, it almost looked like a chainsaw ripped through his leg. The first LE on scene began using his BTK prior to EMS arrival, which stopped the major bleeding. Keep up the great work SWAT-T.” - Menefee

“This past weekend a home invasion occurred in Desoto Parish. The Desoto Parish Sheriff’s Office reported after a vehicle pursuit the K9 dog was actively searching for the driver who had fled the scene. During the search the K9 bit one of the deputies assisting in the search. The first officer on the scene deployed a Belt Trauma Kit! QuikClot was used to stop the bleeding and when medics arrived 2 SWAT-T tourniquets were used as a pressure dressing! The officer was transported to an area hospital for treatment.” - KA/BF

January 2016: Multi-purpose.

“On the sling, I went around the lower arm just above the wrist a couple of times, around the neck and shoulder, and then around the entire torso and upper - then lower arm. That arm wasn’t going anywhere and the patient was very comfortable. I have also used the SWAT-T once as a pressure dressing..."
FIELD REPORTS continued

January 30, 2016: LEO use on civilian

“I just read a letter of appreciation for Officer J.P. On 30 Jan 16, he used his trauma kit to stop the bleeding of a stabbing victim in the xxxx block of xxxx. The medics stated he would have died if not for the officer’s actions. Let’s make sure we put him in for a Medal of Merit for Life Saving for the Summer Awards Ceremony. The letter will come down through the chain of command so you can read it yourself.” - Captain HN

2015: Documented save.

“Severe mid-forearm laceration. Medics arrived to the ED with Pressure Dressing in place and dripping blood. Uncontrolled bleeding from arterial transection. SWAT-T applied in the ED - bleeding terminated.” - VL

2015: LEO use on civilian

“I used my trauma kit as well as another officer’s and my own army windless tourniquet for the shooting up at xxxx and xxxx this past Sunday night. Victim of shooting was shot 7 times with a .45 cal. I applied two tourniquets (1 windlass and 1 SWAT-T) and was able to stop both bleeds. The victim woke up because of the stabilization of the pressure. He was able to give us enough info to put out a crime broadcast before transport.

The doctor said, “he would have died without the tourniquets.”

We also used Celox Hemostatic Gauze for abdominal wounds. EMS took 10 minutes to arrive on scene after I arrived and treated.” - Officer ME

2015: Usage of the SWAT-T in the OSS Trauma Kit

SDPD officer injured in shooting in Kearny Mesa

SAN DIEGO - A San Diego police officer and a suspect have both been shot in Kearny Mesa Sunday, authorities said. SDPD has not confirmed the location, but a perimeter has been set up near the 7700 ...

FOX5SANDIEGO.COM

2015: Documented save.

“When SWAT-T Saved my leg in Syria this past year, thank you for a superb product.” - MR, Contractor (2015)
FIELD REPORTS continued

2015: LEO use on civilian

“The 0245 shooting came in as an accidental shooting at xxxx. Uncooperative family gave conflicting accounts as to who was at the home at the time of the shooting.”

The stories ranged from possible self-inflicted GSW where his unknown friends/associates left the scene with the firearm to accidental shooting by one of his friends/associates who then fled the scene or the last story is one of his friends/associates who shot him.

Victim was shot in the leg (upper thigh exiting out the back of the knee). He suffered massive bleeding from a femoral artery strike. The patient was uncooperative at the hospital before being whisked off to emergency surgery. Last update the patient left surgery in critical but stable condition after major blood loss.

The recently distributed trauma kits saved the patients life after rapid deployment of the SWAT-T tourniquet in the kit.” - AS/LN

2015: LEO use on civilian

“I used another trauma kit tonight. Male with multiple GSW’s. Used the tourniquet on his leg as there was severe bleeding. Used the Celox hemostatic gauze on his arm. He appeared stable when medics transported. Victim is alive due to the OSS Kit issued.” - RR

2015: LEO use on civilian

“Just wanted to advise you that I used my trauma kit today for a stabbing victim at xxx xxxx Street. The patient had multiple puncture wounds to his right arm and multiple puncture wounds to his stomach area. He was in stable condition after this. We applied the tourniquet onto his arm because he was losing a lot of blood. Subject alive and stable due to OSS Medical Kit that was deployed.” - RH

2015: Documented save.

“Couple recent SWAT-T uses: 6 instances in the last few months by officers. Used in field for 3 stabdings to the thoracic cavity and they were used effectively, patient survived. 2 shootings: One was a shotgun wound to left arm and the SWAT-T was placed by an officer...arm was saved. The other shooting was a minor hit in leg from drive by and leg was saved.

The last was an attempted suicide and used to control bleeding...patient lived and arm was saved. I would also like to add they are very to use.

First time used on the deputy, I read and had in place in under two minutes.” - JW

October 1, 2015: Documented save.

“Yesterday 01 Oct 15 at about 0751 hrs., I used the tourniquet from my department issued OSS Trauma Plate Medical Kit. I with the assistance of Officer GA, placed the tourniquet on the victims left leg to control his bleeding from numerous GSW’s.

I later spoke with one of the firefighters who responded to the scene to treat the victims injuries. This firefighter advised that he stayed with the victim until they reached the hospital. The emergency department medical personal credited the victims survival to the use of the SWAT tourniquet, which kept him from bleeding out in the field. See official report for more details” - BE/LY

May 2015: Documented save.

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May 2015: Documented saves.

TO PROTECT AND SERVE!

2 recent SWAT-T uses by law officers. Both officers are instructors with STS Consulting http://www.tactical-ems.com/ - re-posted due to Facebook problems.

Case 1 - Officer attached to XX-Gang Unit: used the SWAT-T on GSW to the thigh. This application was to a gang member that was shot several times by another gang member. He states, “It worked great and stopped the bleed.” The subject died later on from complications from the other GSW’s.

Case 2 - 2 SWAT-T’s used by responding officer to a motorcycle accident with a traumatic amputation mid thigh.

Not so long ago, officers such as these would wait for EMS as the patient continued to lose precious blood. Those watching all the negative media should not forget that officers are out there daily protecting and serving.

STS Consulting, thanks for what you do!”
FIELD REPORTS continued

Police Officer's Use of Tourniquet Saved Kalispell Stabbing Victim's Life

Officers began carrying tourniquets purchased through RoundUp for Safety program.


Police dispatch notified officers of a shooting approximately 6:00 p.m. after receiving a 911 call that an individual had been shot and was on the verge of “bleeding out”. The officers utilized two of the three main components of their Project Triage Trauma Kit to stop the victim’s bleeding and save his life. This included a Officer Survival Solutions pressure bandage and a SWAT-T tourniquet.

These kits were provided due to the efforts of Chief Howell - who himself self-applied the SWAT-T, saving his own life after he and his partner were shot multiple times.


Since entering the fight in Summer 2014, the SWAT-T continues to demonstrate its value on the battlefield as a trauma care device. As reported to TEMS Solutions, the SWAT-T has seen several applications (one-handed and two-handed) which have yielded lives saved after real arterial injuries. Additional comments from the Ukraine include “…very positive feedback on quick learning” and, “when compared to other tourniquets, “…the SWAT-T seems to work better than other options in cases of use over cold-weather gear.” - RA

2014: Documented save with Active Shooter.

“Kennesaw, Georgia - The SWAT-Ts worked as advertised. Two were used as tourniquets and 3 were used as pressure bandages.” - JW

November 2014: Documented save.

“Our local PD bought Pocket D.A.R.K.’s for their officers and less than one month later, an officer utilized his SWAT-T to save the life of gunshot wound —- to the leg victim.” - Dark Angel Medical

November 2014: Documented save.

“Civilian life saved with SWAT-T on New Jersey Turnpike after motor vehicle collision resulted in leg amputation with severe arterial and venous bleeding.” - HR

I was working in Afghanistan and had to treat a military working dog. The dog was near an IED blast and suffered from a mostly de-gloved leg. The leg was bleeding profusely. We tried the CAT and it didn’t work well, traded it out for a SWAT-T that I carry and it stopped the bleeding. Thanks! - AR, US Army
FIELD REPORTS continued

April 15, 2013: Documented saves during the bombing of Boston Marathon.

“After the first bomb struck it was disorienting, and deafening.... I propped myself up on my elbows and saw the second one detonated and at that time I began to run towards my car. By the time I got to my car I regained my wits, and put on my vest and thigh rig (trauma pack) which has some gauze, Israeli dressings, QC, CAT-Tourniquet and several SWAT-T’s.

I made my way back to the incident scene and was able to help my team from the BAA triage some of the patients. I used two SWAT-T’s on leg amputations/partial amputations, and one on a severely injured arm which had what I believed to be a brachial bleed. I found the device to be very useful and was able to apply it quickly... I have always been partial to the SWAT-T because of its ease of use, self explanatory application, small compact size, and ability to be re-adjusted (tightened) without totally loosening/removing the device.” - NM

November 2012: Documented save.

“California officer life saved in 2012 after SWAT-T application.”
- Marc Berry, Officer Survival Initiative

“Citrus Heights - Female Police officer life saved after partner applied a SWAT Tourniquet to her thigh. This occurred after a subject who was being detained grabbed her partner’s gun and began firing.” - Officer John Wycinsky, Citrus Heights Police Department

September 2012: Pediatric Application

Oakland, CA - Officers respond to school and find a male child stabbed in the right arm.

“The Child Was In Significant Pain, Still Bleeding, And The Bar Could Not Be Secured.” - JM

“We found obvious arterial bleeding (inner upper arm), as other officers continued looking for the suspect.” The first officer on scene attempted windlass TQ. After a couple of minutes stopped trying it - due to not being able to secure the tourniquet. The bar would not seat in the locking mechanism due to the curve caused by this 10 year old’s arm.

Fortunately, one of the other officers also carried a SWAT-T. We held direct pressure on the wound, quickly applied the SWAT-T - just above the injury.

The bleeding stopped and the child tolerated the tourniquet and was handed over to EMS a short time later. - JM

New Albany cop survival kits help save lives

Police officers trained to use tourniquet, other items, to save lives When cops arrived, a 17-year-old girl and a 20-year-old man were lying near the icy corner of Lexington Avenue and 1st Street. Every cop walking a beat or riding patrol has...

August 18, 2012: Documented save with a self-application of a SWAT-T.

“The blood was so severe and slippery that I could barely hold the radio microphone” - Chief Howell

Chief Howell was injured as 12+ rounds were fired from an AK-47 and handgun at him and his partner (SWAT Officer Jones). Each officer was struck twice, the vehicle was disabled (due to a round that penetrated the electronics), and no back-up was immediately available.

Chief Howell and Officer Jones’ situation and injuries would have most certainly resulted in death - before back-up and EMS could respond to the scene. After threat mitigation, it was widely accepted among the doctors that the self-applied use of a tourniquet saved Chief Howell’s life. Chief Howell had received training on the SWAT-T the only one day prior to the incident.
FIELD REPORTS continued

November 2011: High speed motor vehicle collision.

“SWAT-T placed on Law Enforcement Officer after brachial artery injury in Motor Vehicle Collision. Worked Great.” - Melissa Costello, M.D., FACEP, Tactical Team Physician

SWAT-T application to brachial artery bleed, after high speed motor vehicle collision. Bleeding terminated. A special thanks to Dr. Costello (Emergency Medicine) and to her co-workers/team for their lifesaving skills. We appreciate her providing this report so that we may all learn from and celebrate their success!

September 2011: Documented save on K9.

“Mid September 2011 I was conducting a high risk search on patrol with my K9 partner. On this day, my K9 partner “Spike” and was shot in the left rear leg by a single bullet from a handgun.

Spike was immediately treated on scene utilizing a SWAT-T and haemostatic agents. We rushed him to surgery at a nearby veterinary hospital where he merely hung onto life. Each and every veterinarian that observed Spike made statements in regards to his blood loss, and “How close” he was to passing due to the incident. It was clearly noted by each of them that the SWAT-T helped save his life.

Some twenty-eight days later Spike and I were back on patrol and competing on the trial field in the WSPCA K9 competitions. We owe it to SWAT-T for this and their quality product. I wish to express this act of gratitude from my family and our department for providing a product that has saved the life of such a great partner. As and Canine handler and tactical team member, I will NEVER deploy without a SWAT-T…” - Nathan and K9 Spike, “2011 Western States Police Canine Association Champion”

2010: Documented save.

“The first time I used a SWAT-T was at a MVC of a County Sheriffs bus with three guards and 15 inmates.

The bus was upside down and as the first unit in I triaged and tagged guys. Then started patching up wounded inmates as they were still chained to seats. Triaged and quick bandages.

None were that bad but one Officer was bleeding from an open compound fracture in his left tib/fib below the knee. I put some pressure bandages on and tried using a b/p cuff to stop bleeding and it didn’t work. I didn’t want to put it above the knee but wouldn’t work below knee we tried to rig a homemade one - no effect.

Then I remembered the SWAT-T I had in by jump bag and grabbed it and read real quick. I then applied below knee and it stopped the bleeding but also let the knee bend and no loss of pulse or sensation in toes. He was able to have surgery and it saved the leg.” - JW

June 2010: Documented save after windlass failure.

US Border Patrol Agent Life Saved.

"Border Patrol Agent Life Saved. Initial failure of windlass tourniquet in high axillary wound."

- CY, US Border Patrol
FIELD REPORTS continued

May 2009: Documented save on axillary wound too high for effective windlass application.

“It was soaked in blood and held great, plenty of friction. Successful application, bleeding terminated.” - SV

White Male falls through glass table, severing brachial/axillary artery. EMS arrives at Trauma Center with critically ill pt actively hemorrhaging.

Bleeding continues through failed pressure dressing. Trauma team attempts to apply a blood pressure cuff for tourniquet, but this fails due to proximity of wound to axilla/shoulder. SWAT-T™ handed to trauma surgery resident physician (not previously familiar with the device). Saphenous vein graph and repair in the operating room.

Two Successful SWAT-T applications.

Springfield police investigate Main Street stabbing in South End

"This is a 90 year old female with several ruptured varicose veins in her left foot. She lost a considerable amount of blood prior to arrival. Was pale, disoriented, & diaphoretic. EMRs couldn’t get the bleeding stopped with trauma dressings. Upon my arrival the dressings were removed, wounds were packed with folding gauze, trauma dressings, & a SWAT-T applied. Bleeding stopped in seconds, patient also had an IV with fluids hung due to hypotension secondary to hypovolemia." - C

A special thanks to Dr. Sydney Vail (Trauma Surgeon) and his staff for their lifesaving skills, and for providing this report so that we may all learn from and celebrate their success!