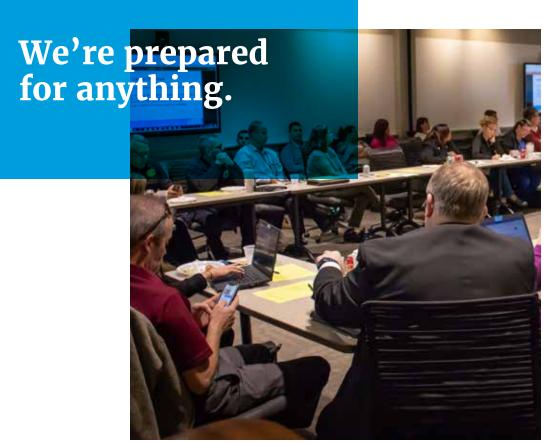
# What happens when we work together?





An affiliate of the Columbus Medical Association

Executive Report 2017 - 2019

# A Letter from the COTS Board President, 2017-2019

I have often been asked "What is the Central Ohio Trauma System" or "What does the Central Ohio Trauma System do?". There are no short answers to these questions because what we do in 2020 is vastly different and more complex compared to what we did in 1998 when COTS was started.

This system initially had great success with the original mission to help organize and improve delivery of care to victims of trauma in Central Ohio. All of us involved with those early endeavors knew that we were working with a very special organization. And with those early successes, others came to recognize, and more importantly trust, the value of our regional trauma system.

As a result, the Central Ohio Trauma System now, in addition to trauma care, influences and guides the delivery of emergency medical care and disaster preparedness and response for, most recently, three geographic areas of Ohio. This has been made possible by the support, and collaboration of the Columbus Medical Association (CMA) and its Foundation, hospitals, and hundreds of agencies and jurisdictions and their associates.

This report is written and published during an unbelievable time in history. However, all of the COTS organization, partners, and affiliates will be able to look back with pride at how we, as a system, responded to the COVID-19 pandemic. We will also learn much from these times and use that knowledge to prepare for future events. This is what we do.



Medard Lutmerding, MD, FACEP COTS Board of Trustees President, 2017-2019



## **Mission**

The Central Ohio Trauma System (COTS) is a group of physicians, healthcare professionals, and other experts working together to improve patient outcomes related to trauma, emergency services, and disaster preparedness.

### **Vision**

Better care—better outcomes through collaboration, education, and prevention.

We believe that by valuing diversity through defining our IDEA principles and utilizing them during our course of doing business, we are better prepared and able to meet our mission.



**Central Ohio Trauma System**[ **COTS** ]

# Professionals together put "prepare, plan, respond" into action

Imagine when the worst happens—a natural disaster, an active shooter, a medical trauma or emergency.

What if you were too busy coordinating and planning with each other to respond?

What if you had no shared information to improve care and save lives?

# What if you weren't trained, prepared and ready to respond for us?

Throughout the state of Ohio, you—our healthcare professionals—face the complex and challenging task of preparing, planning, and pulling together all of the resources, processes and next practices that are needed to keep our local communities safe.

But the task is huge—not one for a single individual, organization or agency. And the required resources are diverse, wide-spread, and often isolated from others.

What if you had a powerful and collaborative ally ready to help you tackle your toughest issues and bring about the results you need?

# Well, you do. Meet the professionals at the Central Ohio Trauma System.

Together, with our members, we...

- + Bring professionals and ideas together
- + Track and examine life-saving data
- + Push boundaries beyond organizational silos

- + Synthesize combined thinking to create guidelines and standards for all
- + Educate colleagues, constituents, and communities

All designed to ensure that you are prepared to respond and deliver.

The true power of collaboration lies in how we rise and lift others. When we come together, we all become more powerful and amazing things happen for all of our greater good. Join us as a member of the Central Ohio Trauma System.

Stronger resources. Inspired change. Safer communities.







### **COTS Trauma Division**

We gather information that can prevent trauma and help local hospitals improve trauma care for their patients.

COTS manages the trauma registry and coordinates trauma education and performance improvement (PI) and serves as the Regional Trauma Organization (RTO) for 19 counties in Central and Southeast Ohio. These counties include 8 trauma centers, 20 acute care facilities, 1 alternate care facility, and 11 free standing emergency departments (FSED) for a total of 40 healthcare facility partners.

#### What we did in 2017-2019:

#### **Expanded Performance Improvement Activities**

Two key activities with broad ranging impact:

- Trauma triage and destination of trauma patients was evaluated to include over and under triage in the region, evaluation of air and ground transports, scene runs and interfacility transfers at trauma centers and acute care hospitals. The overall finding was that the ground and air ambulance first responder agencies transported the right patient to the right place, timely.
- Approved the development of a Regional Trauma Quality Improvement Program (TQIP) through the American College of Surgeons. This will allow for a collaborative approach to addressing quality care delivery through data collection, reporting, analyses, and education.

# National Recognition for Trauma Nursing Care Education in COTS' Region

"Trauma in the First 48 Hours" poster presentation was accepted at TraumaCon 2020. The Multi-institutional Course has been presented on a rotational basis at the central Ohio trauma centers since 2016.

#### **Maintained the Regional Trauma Registry**

The Trauma Registry is used to perform data validation, publish injury reports, and recognize injury prevention opportunities. The registry supports trauma PI initiatives, produces regional hospital benchmarking reports, develops the critical care nursing course, and identifies educational needs for our members. COTS works on behalf of our member hospitals to ensure the delivery of accurate and timely trauma data to the Ohio Trauma Registry so that data may be used to improve outcomes across our region and the state.

 Developed a comprehensive data collection timeline to assure complete and consistent trauma data submission for PI and research in 2017. With the addition of six new facilities in 2018, compliance of data submission increased from 86 to 100% by the end of the year.  Implemented the use of 2 factor authentication for facilities accessing the COTS web-based registry as part of ongoing commitment to ensuring data security.

#### Implemented a Region-Led State Data Validation Project

The goal of the region-led state data validation project is to ensure the data integrity according to the State of Ohio's Trauma Registry definitions. The project allowed successful collaboration of the six Ohio regional trauma registries to identify issues and improve data collection.

 The six regions developed a poster presentation describing the project that was accepted to be presented at the 2020 Trauma Center Association of America (TCAA) conference.

#### **Inspired Care Providers to Share Best Practices**

COTS hosted the 2017 and 2019 Trauma Research Symposiums. Trauma care experts from all eight-member trauma centers share best practices in the form of research as podium or poster presenters.

Three significant Guidelines have been developed and distributed:

- Tranexamic acid (TXA) Guideline
- Spinal Motion Restriction Guidelines
- Regional Triage and First Responder Transport Guidelines

#### **Coordinated Trauma Education for Member Hospitals**

As one of the busiest Advanced Trauma Life Support® franchises in the U.S., COTS trains over 400 physicians, advanced practice providers, and other healthcare professional auditors annually from 32 states and two

countries. We educate over 350 nurses annually in courses related to emergency and trauma care and continue to remain committed to coordinating trauma courses for member hospitals.

Our ability to coordinate courses at the regional level saves member hospitals between \$5,000 and \$60,000 per year in a course coordinator's salary, depending on the organization's size and educational needs.

In 2017-2019, the following courses were coordinated:

- Advanced Trauma Life Support® (ATLS) began offering the 10th edition in January 2019
- Trauma Nursing Core Course<sup>™</sup> (TNCC) began offering the 8th edition in August 2019
- Emergency Nursing Pediatric Course<sup>™</sup> (ENPC) began offering the 5th edition in February 2019
- Trauma in the First 48 Hours<sup>®</sup>
- Disaster Management Emergency Preparedness Course<sup>™</sup> (DMEP)

State/Regional Conferences and workshops hosted or coordinated by COTS:

- ICD-10-CM & ICD-10-PCS Refresher Course: Even Sharper Coding for Trauma
- State TQIP Quality Summit
- Trauma Data Professionals: The Driving Force of Data Management





# **COTS Healthcare Coalition (Disaster) Division**

We coordinate emergency preparedness planning, training, and response activities for 36 counties in Central, Southeast (SE), and Southeast Central (SEC) Ohio.

Ohio's emergency preparedness work is broken out into eight Homeland Security Regions and COTS coordinates the efforts of regions 4, 7, and 8. (Refer to map on page 12)

Members represent hospitals, public health, first responders, emergency management agencies, and congregate living organizations.

On January 1, 2019, COTS began coordinating the SE/SEC Healthcare Coalition. This expanded relationship allowed us to strengthen our planning and response to trauma, emergency services, and disaster preparedness. A SE/SEC Coalition Advisory Board (SECAB) was seated, and Bylaws adopted.

#### What we did in 2017-2019:

#### **Expanded and Maintained the Healthcare Incident Liaison**

- HIL command provides on-call situational awareness and response 24/7/365 for healthcare coalition partners.
- The HIL staff responded to 1,006 emergency notification pages during 2017-2019 (231 in 2017; 292 in 2018; 483 in 2019).
- The HIL is integral in the coordination efforts for the Arnold Sport's Festival, Red, White & Boom, the Franklin County Community Action Plan and Overdose Surge Notification

Plan, the weekly response ready reports, an expanded R3 format for home Ohio State football games, and other real-world events occurring in our regions.

#### **Regional Preparedness Planning**

COTS is the Regional Healthcare Coordinator for the Central Ohio Regional Healthcare Emergency Preparedness (RHEP) Coalition and the SE/SEC Ohio Healthcare Coalition (SEOHC). The RHEP and SEOHC Coalitions are public-private partnerships that facilitate, support, and strengthen healthcare and related entities to prepare for, respond to, and recover from emergencies.

Examples of our regional collaborations:

- Expanded the Central Ohio Disaster Incident Management System (COHDIMS) platform to gather situational awareness and information sharing for the SE/SEC regions.
- Updated the RHEP Coalition Response Plan
- Developed the RHEP Coalition Preparedness Plan
- Developed the SEOHC Response Plan and Preparedness Plan, and completed a Regional Hazard Vulnerability Analysis (HVA)

- Developed a tri-state communications group for the SE/ SEC regions to assist with situational awareness, planning, and response.
- The RHEP and SEOHC Coalitions conducted an annual No-Notice Coalition Surge Test to test the ability to evacuate 20% of the coalition's hospital acute care bed capacity within 90 minutes.

#### Hosted the Central Ohio Healthcare Coalition Summit

The Central Region has hosted an annual Coalition Summit each year for the past five years, bringing together coalition partners for a day of networking and preparedness education. In 2019, Dr. Kevin Yeskey was the key-note speaker. Dr. Yeskey spoke about the path forward for coalitions from the federal perspective and serves as the Principal Deputy Assistant Secretary for Preparedness and Response Office of the Assistant Secretary for Preparedness and Response U.S. Department of Health and Human Services.

Now that COTS coordinates the SEOHC, we plan to implement educational Summit's for those regions.

#### **Local Healthcare Coalitions (LHC)**

- All 15 central region counties have LHCs
- The SE/SEC regions have 11 LHCs which encompass
   19 of the 21 counties
- The SE/SEC LHCs distributed 150 tourniquets to all 21 counties

#### **National Recognition**

#### **Publications**

Operation Continued Care: A large mass casualty, full scale exercise as a test for regional preparedness was published in Surgery in August 2019 and co-authored by COTS members Drs. J. Allen McElroy, Steve Steinberg, Robert Falcone, and Nurse Jodi Keller.

#### **National Presentations**

Jodi Keller and Kara Keller presented the COTS 2015
 Regional Response to a Botulism Outbreak at (2) Coalition
 conferences in Boston and (1) in San Diego during 2017 and
 2019

Started the national conversation on mass casualty triage which resulted in the document *Mass Casualty Triage Paradigms and Pitfalls* by ASPRTRACIE in July 2019.

Coordinated multidisciplinary mass casualty conservations throughout our 36 county region to begin to address the ASPRTRACIE guidance document.

#### **Implemented COTS University**

This offers our Coalition partners the opportunity to obtain just-in-time or pre-scheduled training for the use of platforms including but not limited to COHDIMS, SurgeNet, and OHTrac.

The COTS Newsletter is distributed monthly to ensure Coalition communication.





# **COTS Emergency Services Division**

We come together to share best practice and improve outcomes.

The Emergency Services Division serves as a liaison between first responders and hospital emergency departments. By utilizing a collaborative approach and shared values, we strive to solve difficult healthcare delivery challenges through evidence-based research, data collection, and best practice strategies. We share in the mission of improving patient outcomes. In doing so, we provide value to the community.

#### What we did in 2017-2019:

#### **Expanded RTAS**

Implemented an updated real-time activity status (RTAS) website. The RTAS system is a web-based program used by all Franklin County emergency departments and seven out of county hospitals to notify EMS when their emergency departments are overly busy or diverting EMS patients to less busy emergency departments. This system helps EMS get the right patient to the right place the first time and works in conjunction with the Emergency Patient Transport Plan.

#### **Inspired Care Providers to Share Best Practices**

We initiated or revised shared best practice guidelines

- Attestation: Regional Hospital Resource Guide for First Responders
- Emergency Patient Transport Plan (EPTP)
- EMS Handoff (Timeout)
- First Responder Infectious Exposure Guideline
- Guideline for Early Recognition and Prehospital Management of the Adult Septic Patient
- Human Trafficking Resource for EMS
- Left Ventricular Assist Device (LVAD) Guidelines for EMS
- Regional AirMedical Transport Communication and Safety Guidelines
- Regional Concealed Carry Guidelines for Patients and Off Duty Law Enforcement Officers

#### **Expanded Performance Improvement Activities**

Members meet quarterly, or more often as needed, to review hospital diversion data and have implemented a post-EPTP activation huddle to address diversion concerns real-time to ensure patient access to care.

In 2017, members convened to create the regional EMS handoff (timeout) safety initiative which standardized an approach to handoff communication during transfer of care from prehospital providers (sender) to the hospital care providers (receivers).

Participated in the development of the Franklin County Opioid Activity Level (FOCAL) Map with The Ohio State University Center for Urban and Regional Analysis and the College of Public Health. This project's aim was to create an automated, interactive map of opioid overdose events. COTS acted as the liaison between EMS and the researchers for 911 data collection.

We offer our members access to a group purchasing organization, Savvik.

As part of our effort to increase our community awareness and value, we hosted a delegation of Ukrainian medical professionals in October 2019 to share our work as a regional trauma, emergency services, and disaster organization.





# **Summary**

In central and southeastern Ohio, COTS acts as a convener and planner around issues of emergency and trauma healthcare delivery and readiness for Homeland Security Regions 4, 7, and 8. (~ 42% of the state). We provide knowledge and a level of infrastructure not duplicated elsewhere in the region or state.

Our emergency planning coordination is mandated to Regions' 4, 7, & 8. However, any agencies interested in participating in trauma and emergency services collaboration are able to join.

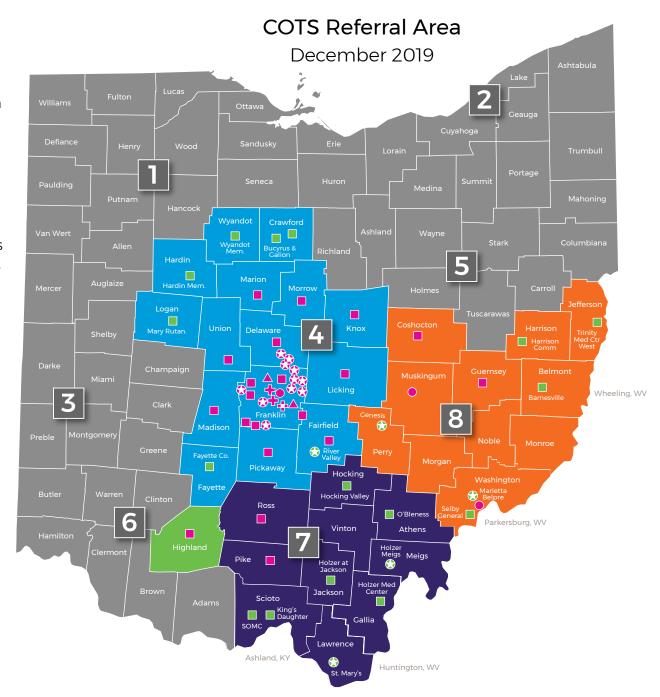
Hospitals pay a membership fee to participate in the Regional Trauma Organization (RTO).

#### **RTO** participating hospitals

- + Adult Level I Trauma Center (2)
- Ped Level I Trauma Center (1)
- ▲ Adult Level II Trauma Center (2)
- Adult Level III Trauma Center (3)
- Free Standing Emergency Dept (11)
- Acute Care Hospital (21)

# Hospitals that do not participate in the RTO

- Non COTS Member Hospital (16)
- Non COTS Free Standing Emergency Dept (5)



# **Cost Funding**



**ASPR**: Assistant Secretary of Preparedness & Response

**CMAF**: Columbus Medical Association Foundation

**GPO**: Group Purchasing Organization

**ASPR** 

Education

CMAF

Hospitals

EMS

■ Board & Other Donations

■ GPO

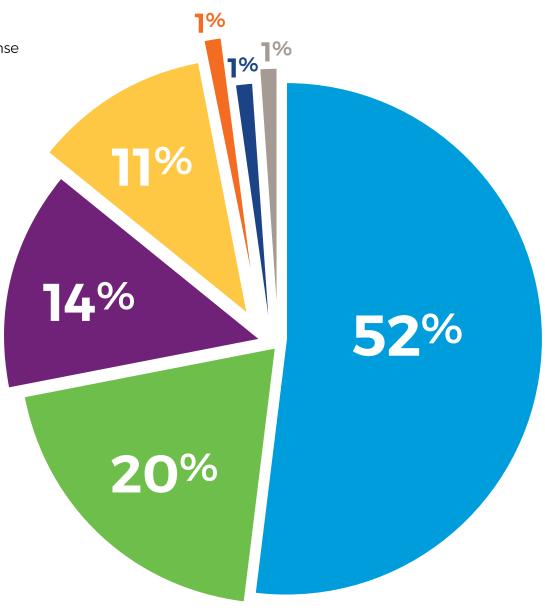
#### **Special Thanks**

The generous financial support of our funders has allowed us to meet our mission. The following grantors and a host of organizational and individual donors support the work of COTS:





For a full list of hospital and emergency medical service agency donors, please visit our website @ www.centralohiotraumasystem.org/about-us/funders





#### **COTS Staff**

#### Administration/Finance Staff

Robert E. Falcone, MD, FACS
Chief Executive Officer

Sherri Kovach, MS, BSN, RN, EMT Executive Director, HIPAA Privacy/Security Officer

Wendi Lowell Administrative Assistant

Laurie Hawkins Chief Financial Officer

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# A Letter from the COTS Board President for 2020-2022

#### **Looking Toward the Future**

As we look to the future, there is much uncertainty as to how things will be different post COVID-19. One thing I can assure you is that COTS is here and more relevant than ever. We have seen a vastly changing world and we know we, too, will need to adapt.

Our strategic plan, while it may need updated and adapted after the current pandemic, still shows how much COTS needs to be implemented into the missions of all our healthcare coalition partners in Central and Southeastern Ohio. We will continue to focus on those areas that are deemed most important including education, trauma and disaster preparedness, and overall coordination and expansion of our healthcare coalitions and trauma and emergency services memberships.

As we have seen with the current crisis, we believe the value of COTS is evident but we do need others to see that as well so that we can continue to maintain our sustainability for years to come.

Mr. Tom Allenstein, MBA, RN



# Strategic Plan 2020-2022

# **Our Goals and Objectives**



Provide programming, education, and collaborative forums for professionals in the areas of trauma, emergency services, and disaster preparedness to improve patient outcomes.

# AWARENESS AND ENGAGEMENT

Dramatically increase organizational awareness and member engagement through outreach and communication efforts.

# VALUE AND COMMUNITY IMPACT

Articulate and demonstrate COTS' positive impact on the health of the community in Central and Southeastern Ohio.

# ORGANIZATIONAL EXCELLENCE AND SUSTAINABILITY

Pursue organizational excellence and financial sustainability by increasing and diversifying revenue sources.

#### **Objectives**

- A. Enhance Trauma Services
  Provide information, education, and collaborative forums for trauma physicians and other professionals to work together to provide optimal care to trauma patients in the region.
- B. Expand Emergency Services
  Expand COTS' role as a liaison
  between first responders and
  hospitals working together to
  improve outcomes.
- C. Coordinate Disaster
  Preparedness Efforts
  Facilitate regional efforts to
  support & strengthen healthcare
  and related entities to prepare
  for, respond to, and recover from
  emergencies.
- D. Regional Education
  Coordination
  Continue to be a centralized
  source for trauma, emergency,
  and disaster preparedness
  education.

#### **Objectives**

- A. Elevate Visibility of the COTS Brand Increase COTS' brand awareness among key stakeholders.
- B. Increase Member Engagement Increase member engagement by boosting communication and outreach efforts and offering quality programs and collaborative experiences.
- Partnerships
  Cultivate and strengthen
  innovative strategic partnerships
  and other relationships to
  advance COTS and its mission.

C. Cultivate Strategic Community

#### **Objectives**

A. Demonstrate Value and Community Impact Participate in an enterprise-wide research effort to demonstrate the value and community impact of COTS and Affiliates.

#### **Objectives**

- A. Diversify and Increase Funding
  Diversify and increase funding
  by strategically pursuing support
  from partners who benefit from
  COTS and by seeking other
  revenue sources.
- Affiliates
  Foster a positive, collaborative, enterprise-wide culture that increases alignment of COTS and

Affiliates for the greater good.

B. Increase Alignment with

- C. Promote Diversity, Equity, Inclusion, and Access Promote diversity, equity, inclusion, and access in all programming and operations.
- D. Enhance Governance Follow best practices for governance and recruit, engage, and develop qualified, leadership for the Board of Directors and Advisory Boards.





# Don't delay! Get involved.

Join a committee. Teach. Give back.

#### Here's how...

To donate to the mission of COTS, go to www.centralohiotraumasystem.org/donate

To get involved in improving care on a regional level, contact the Executive Director at skovach@centralohiotraumasystem.org



**Columbus Medical Association** 

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