

Central Ohio Trauma System

2015-2016 EXECUTIVE REPORT

A LETTER FROM COTS CEO

When Drs. Ed Bope and Theresa Long and I started the Central Ohio Trauma System (COTS) under the auspices of the Columbus Medical Association (CMA) in 1998, we had no idea it would become such an important asset for the citizens of Central Ohio. Many good people from the region's hospitals, emergency medical services (EMS), fire departments, and public health department worked to organize and standardize care for the injured. As our success grew, we took on a number of other issues: disaster preparedness and coordination, non-injury emergencies, professional education, and research. In fact, COTS and its physician volunteers teach more Advanced Trauma Life Support Courses than anywhere else in the United States, and our protocols and practices provide benchmarks for other regional organizations nationwide. All of these important accomplishments would not have happened without the unwavering support of the CMA and the financial support of its Affiliate, the Columbus Medical Association Foundation. Thanks to you, our customer and healthcare partner, for all the hard work you do every day to support and improve the best regional trauma organization in the nation.

-Bob



Robert E. Falcone, MD, FACS CEO, Columbus Medical Association and Affiliates

MISSION

The mission of COTS is to improve patient outcomes related to trauma, emergency services, and disaster preparedness.

VISION

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

COTS is a voluntary, cooperative, self-regulatory organization and maintains a 501(c)(3) Internal Revenue status for charitable, educational, and scientific intent.

COTS is a neutral, centralized agency created to establish and maintain coordination among hospitals, EMS, public health, and other emergency care stakeholders. This infrastructure is patient-centered and generates community initiatives that bridge the gap between trauma, emergency services, and disaster preparedness and response for our region and beyond.

The success of COTS is due to the tireless dedication of many stakeholders, including physicians, nurses, EMS providers, law enforcement, public health experts, emergency preparedness and response personnel, registrars, program coordinators, government officials, administrators, and countless others.

The work done by our stakeholders ultimately benefits the patient, even though no direct patient care services are provided through Central Ohio Trauma System forums.

Jane Kilgore, RN, Genesis Healthcare System presents her poster at the COTS Trauma Research Symposium



HOW YOUR INVESTMENT IN COTS PAYS OFF FOR COMMUNITIES ACROSS CENTRAL AND SOUTHEAST OHIO

The Central Ohio Trauma System was formed in 1998 as a collaborative forum to explore solutions for increasing victim survival after a critical trauma event. In 2002, COTS took on the role of coordinating disaster preparedness and response for Central Ohio hospitals and healthcare systems.

To meet the needs of current stakeholders, COTS will expand its services in 2017 to implement three divisions: trauma, emergency services, and disaster preparedness.

Work is already underway to execute these changes, and we have made significant strides over the last six months. Our goal is to provide even more robust services to impact the health and wellbeing of citizens across Central and Southeast Ohio.

Each of the three divisions will have its own strategic advisory board that will report to the Central Ohio Trauma System Board. All four boards are expected to be operational by the end of the second guarter of 2017.



Dr. Steve Steinberg, The Ohio State University Wexner Medical Center presents the Hartford Consensus at the COTS Trauma Research Symposium

2015-2016 ACCOMPLISHMENTS BY DIVISION

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) for 15 counties in Central and Southeast Ohio. These counties include 7 trauma centers, 18 acute care facilities, 1 alternate care facility, and 3 free standing emergency departments (FSED) for a total of 29 healthcare facility partners.

What we did in 2015-2016:

Reported Critical Insights to Care Providers

Last year, we published the "2015 COTS Injury Report: A Health Assessment" in partnership with the Columbus Public Health Department. We used data from our trauma registry to provide statically relevant information describing the Franklin County at-risk population for various injury types. The 2015 Injury Report was distributed to over 150 COTS' affiliates, area agencies, and healthcare providers with an interest in injury prevention.

Dr. Victor Dizon and Andrea Light, RN, Mount Carmel West Trauma Center, participate in regional trauma discussion





Dr. Marco Bonta, OhioHealth Riverside Methodist Hospital, chairs the Clinical Trauma Committee

Standardized Trauma Nursing Care in COTS' Region

A review of the literature revealed an absence of nationally recognized trauma nurse and advanced practice provider (APP) objectives. An assessment of trauma nurse education beyond the Emergency Department (ED) in our region also revealed a gap. COTS convened trauma nurse experts from our 7 trauma centers to develop:

- Standardized Nurse Objectives for the Trauma Nurse
- Advanced Practice Providers Process Objectives
- One-day, simulation-based course for critical care nurses titled Trauma in the First 48 Hours and to date, we have trained 76 trauma nurses in our region
- Manuscript titled "Establishing Standards for Trauma Nursing Education: The Central Ohio Trauma System's Approach" was accepted for publication in the *Journal of Trauma Nursing*

Aided EMS in Routing Patients Away from Overcrowded Facilities

COTS maintains a Real-time Activity Status (RTAS) that allows EMS to use computer software to learn when EDs are operating at capacity, so they can divert stable patients to an alternate facility. When four or more EDs simultaneously post divert status, a citywide diversion plan is automatically activated. This system can be used during a disaster to determine which EDs are at critical census.

Maintained the Regional Trauma Registry

The Trauma Registry is used to perform data validation, publish the injury report and recognize injury prevention opportunities, support trauma PI initiatives, produce regional hospital benchmarking reports, develop the critical care nursing course, identify educational needs for members, support the development of House Bill 261, and provide data supporting the American College of Surgeons' re-verification process for COTS' seven trauma center member hospitals. 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.

Implemented a Registry Data Validation System

The process of developing, implementing, and refining a registry data validation system is integral to optional trauma registry operations. The goal of COTS' data validation service is to ensure that data reflects the inpatient medical record and has been

interpreted according to the State of Ohio's Trauma Registry definitions.

 Developed a comprehensive data collection timeline to assure complete and consistent trauma data submission for performance improvement and research in 2017

Inspired Care Providers to Share Best Practices

COTS hosted the 2015 and 2016 Annual Trauma Research Symposiums in collaboration with the Center for Continuing Medical Education at The Ohio State University Wexner Medical Center and the emergency preparedness grant from the Assistant Secretary of Preparedness and Response (ASPR). Trauma care experts from all seven-member trauma centers come together each spring to share best practices in the form of research as podium or poster presenters.

Coordinated Trauma Education for Member Hospitals

As one of the busiest Advanced Trauma Life Support (ATLS) franchises in the U.S., COTS trains over 400 physicians annually. We also educate over 250 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 salary, depending on the organization's size and educational needs.

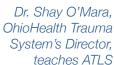
In 2015-2016, the following courses or guides were created and/or coordinated:

- ATLS
- Trauma Nursing Core Course (TNCC)
- Emergency Nursing Pediatric Course (ENPC)
- Developed the Spine Immobilization Guideline for EMS

Collaboration Between Prehospital and Hospital Trauma Care Providers

Partnered with the Columbus Division of Fire and trauma experts from OhioHealth Grant Medical Center and The Ohio State University Wexner Medical Center's level I trauma centers to revise, activate, and evaluate the Surgical Emergency Response Team (SERT).

> Dr. David Keseg from the Columbus Division of Fire leads a SERT after action debriefing with trauma care leaders from Columbus Fire, OhioHealth Grant Medical Center, and COTS.





Kathy Haley, RN, Nationwide Children's Hospital, teaches TNCC





COTS DISASTER PREPAREDNESS DIVISION

COTS conducts disaster planning, training, and response activities for 15 counties in the Central Ohio region.

Members include 5 trauma centers, 21 acute care facilities, 2 alternate care facilities, and 3 FSEDs, for a total of 31 healthcare facility partners.

What we did in 2015-2016:



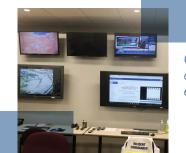
Captain Kratzer, Grandview Heights Fire discusses emergency care initiatives with John Sands and Mark Huckaby, OhioHealth EMS.

Established and Maintained the Healthcare Incident Liaison (HIL) Command

HIL Command provides on-call response services 24/7/365 for hospitals and other healthcare partners. HIL staff responded to 143 documented emergency pages in 2015 and 168 in 2016. They were integral in the 2015 Dublin nitrate water advisory, the 2015 botulism-poisoning event in Fairfield County, the coordination of the Central Ohio healthcare community's response to the 2015 Ebola threat, and proactive situational awareness for events such as the annual Columbus Red, White, and Boom celebration and the Republican National Convention. New in 2016, the HIL has been written into the Franklin County community action plan for Opiate Overdose Surge Notification.

Hosted the 1st and 2nd Central Ohio Healthcare Coalition Summit

COTS coordinates the Central Ohio Healthcare Coalition, which consists of 13 local county coalitions with over 200 healthcare agencies. Each year, COTS hosts an annual summit to provide the opportunity for all coalition members to convene, share experiences, educate, and plan for disasters as a region.



COTS houses an emergency operations center that is ready 24/7/365 to meet your emergency communication needs



To learn more about the Stop The Bleed Campaign, contact jkeller@centralohiotraumasystem.org



Initiated the Stop The Bleed Campaign

No one should die from uncontrolled bleeding. The Stop The Bleed Campaign aims to prevent deaths after an active shooter event through the use of a seamless, integrated response system. COTS placed combat tourniquets in strategic places within Franklin County where large groups gather. COTS partnered with OhioHealth EMS to develop and conduct collaborative education programs for lay people on how and when to apply the lifesaving tourniquets.

Local County Coalitions

13 of the 15 Central Ohio counties have local county coalitions to address emergency preparedness initiatives and establish resiliency during a disaster.

Community-Wide Full-Scale Disaster Exercise

COTS is the Regional Healthcare Coordinator for the Central Ohio Healthcare Coalition (COHC). The COHC conducted a full-scale exercise testing local and regional response to an infectious disease medical surge event.

Continuity of Operations Training/Planning (COOP)

COOP training/plans ensure that organizations can perform essential functions during business interruption and return to normal operations after a disaster. COTS hosted 2 trainings for 32 healthcare partners. 31 hospitals and FSED developed facility COOP plans.

New Information Technology Infrastructure

Implemented a new Cloud based emergency coordination, resource management, and information sharing system to ensure seamless communication between 31 hospitals and FSEDs and over 200 healthcare agencies.

COTS EMERGENCY SERVICES

Over the years, COTS has used its ability to convene healthcare partners to address critical healthcare needs beyond trauma and disaster preparedness.

The implementation of a strategic emergency services division will better serve our community and help to improve outcomes for patients experiencing medical emergencies. Thirty-seven emergency service first responders and two air medical companies participate in COTS emergency services, trauma, and disaster initiatives, including participation as members of the Board of Trustees.

What we did in 2015-2016:

Participated in the Franklin County HealthMap 2016 Needs Assessment

The Franklin County HealthMap 2016 is a collaborative effort intended to help hospitals and other organizations better understand the health needs and priorities of Franklin County residents.

Developed Emergency Care Initiatives

- EMS medical direction guidelines
- Annual review and updates to the Emergency Patient Transport Plan
- Convened a work group to develop a standardized patient care handoff report between EMS and hospital teams



Board members Drs. Med Lutmerding, Mount Carmel Health System, and Michael Dick, Ohio State University East Hospital, and Chief Jim Davis, Columbus Fire, discuss the opiate crisis in our community.



SUMMARY

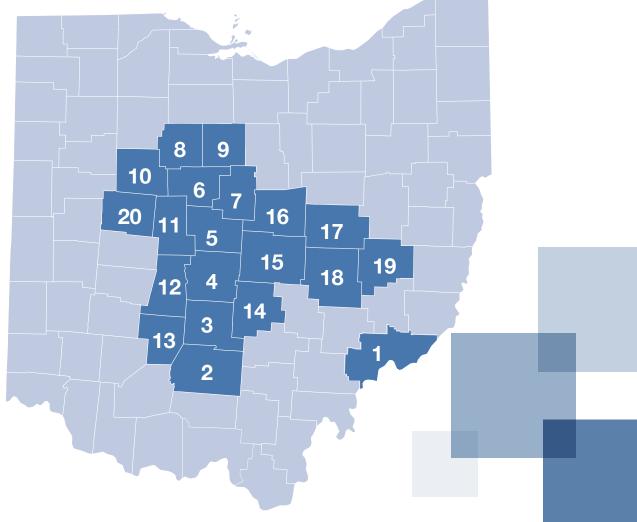
COTS acts as a convener and planner around issues of emergency healthcare delivery and readiness in Central and Southeastern Ohio. We provide knowledge and infrastructure not duplicated elsewhere in the region or state.

Counties served by COTS

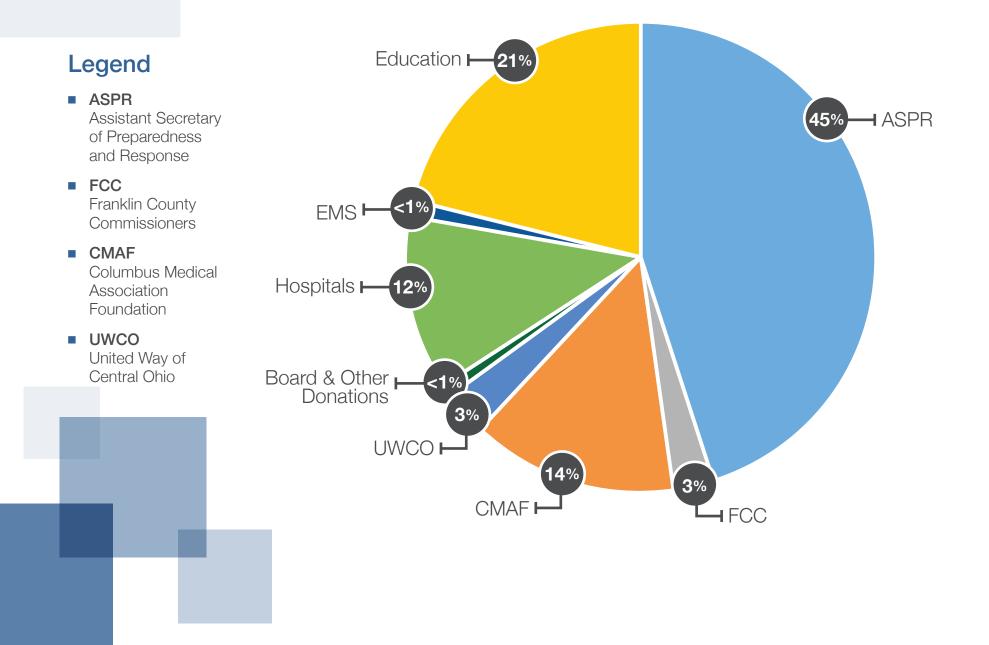
11. Union

- 1. Washington
- 2. Ross
- 3. Pickaway
- 4. Franklin
- 5. Delaware
- 6. Marion
- 7. Morrow
- 8. Wyandot
- 9. Crawford
- 10. Hardin
- 12. Madison
 13. Fayette
 14. Fairfield
 15. Licking
 16. Knox
 17. Coshocton
 18. Muskingum
 19. Guernsey

20. Logan



COTS FUNDING



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:





Columbus Medical Association Foundation





United Way of Central Ohio Member Agency

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

COTS STAFF

Robert Falcone, MD, FACS Chief Executive Officer

Sherri Kovach, MS, BSN, RN, EMT Executive Director

Kelsey Blackburn, AS, CHEP Regional Healthcare Coalition Coordinator

Jim Evans, MBA, BS, Paramedic Emergency Services Coordinator

Roxanna Giambri, BS, RHIA, CSTR Data System Analyst

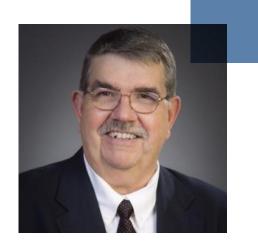
Janelle Glasgow, ADN, RN, CPEN Nurse Educator

Vickie Graymire, MS, BSN, RN, CEN, CAISS Performance Improvement Coordinator

Mark Hollar, PCP, COML Disaster Operations Specialist

Jodi Keller, RN Associate Director of Healthcare System Emergency Preparedness

Wendi Lowell Administrative Assistant



Medard Lutmerding, MD, FACEP Mount Carmel Health System President, COTS Board of Trustees

When did you join COTS and why?

I joined COTS in 2000 and continue my involvement because this organization uniquely and successfully encourages the participation of a wide variety of safety and healthcare professionals to accomplish its mission.

The value of COTS relates not only to Columbus, but also to the Central Ohio region. Our citizens benefit through COTS' initiatives to enhance trauma, emergency services, and disaster response.



J. Allen McElroy, MD, FACS Trauma Medical Director, Level III Trauma Center Marietta Memorial Hospital Vice President, COTS Board of Trustees

What is the value of COTS to you and your organization?

Marietta Memorial Hospital (MMH) operates one of the busiest Level III trauma centers in Ohio and COTS offers us a relationship and resources that are invaluable. As a COTS member, I am able to connect with other institutions and like-minded providers who desire the highest quality of care for our patients. COTS is the backbone for trauma education, registry support, validation of services, and legislative insight for its members. COTS has been a significant factor in advancing and promoting the Trauma Program at MMH in the community and in the region.



Susan Tilgner, MS, RD, LD, RS Franklin County Health Commissioner Secretary-Treasurer COTS Board of Trustees

We dedicate this report to Susan Tilgner, Franklin County Health Commissioner for her long standing service to COTS and support of our mission. Enjoy your retirement and know you will be missed.



Robert Lowe, MD, FACEP

OhioHealth Doctors Hospital Immediate Past President COTS Board of Trustees

Thank you for your continued service.



Central Ohio Trauma System

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

1390 Dublin Road, Columbus, Ohio 43215 ph 614-240-7419 fx 614-240-7416 CentralOhioTraumaSystem.org

