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ANNOTATED GUIDANCE AND RECOMMENDATIONS FOR THE ROLE AND ACTIONS OF EMERGENCY MEDICAL SERVICES SYSTEMS IN THE CURRENT OPIOID AND DRUG-RELATED EPIDEMICS

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☐ **Abstract—Background: The U.S. and worldwide death toll from opioids and other drugs has accelerated, rivaling all other causes of premature death. Emergency medical services (EMS) now has an evolving role in providing solutions. Methods: EMS medical directors from the majority of the largest U.S. cities and global counterparts met to share/compile an inventory of best practices derived from their respective high-volume experiences in jurisdictions with >114 million residents combined. In turn, they created a consensus guideline document for the purposes of information-sharing among themselves and other interested parties. Results: The group concluded that EMS personnel have evolving training needs with respect to new medical care challenges, but they also recommended that agencies have a special place within the collective of those hoping to provide solutions to the public health crisis of addiction and drug-related epidemics. In addition to intervening in real-time overdose events, it was recommended that they partner with other key stakeholders to develop mechanisms to end the repetitive cycle of emergency rescue followed by an almost immediate return to addictive behaviors. EMS providers should be trained to optimally communicate, refer, and direct the affected individuals to appropriate resources that will provide viable and evidence-based pathways directed toward long-term recovery. Conclusions: Beyond a need to update acute medical rescue practices and improved assessment techniques, EMS providers should also learn to optimally communicate, encourage, and even participate in facilitating management continuity for the affected individuals by identifying and using the appropriate resources that will provide viable, evidence-based pathways toward sustained recovery. Published by Elsevier Inc.**

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*The Metropolitan Municipalities EMS Medical Directors Group is a de facto coalition of the designated jurisdictional emergency medical services medical directors for most of the United States' 50 or so most populous cities. It also includes medical director counterparts in Europe and many other countries globally as well as key federal agencies and the leadership from several applicable professional medical societies, including the National Association of Emergency Medicine Services Physicians, the American College of Emergency Physicians, and the American Academy of Emergency Medicine. Other participants are listed at http://www.gatheringofeagles.us/2018/2018information.htm.

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INTRODUCTION

Drug overdoses, and particularly those related to prescription and nonprescription opioids, have come to be recognized by many as the leading cause of death of Americans <50 years of age and as a major burden on society as a whole (1–4). In the United States alone, it has been estimated that >63,632 persons died during 2016 from drug overdoses, an incidence of 19.8/100,000 population (1). Comparatively, the number of people killed in U.S. car crashes during the same period was 37,461 (5). By 2015, the number of persons dying from heroin alone had exceeded that of gunshots (5–8). Simply put, the drug-related death toll, and opioid-related deaths in particular, have become the highest ever recorded for these largely preventable deaths, and the geographic distribution has expanded (1–4,6,8–10). In addition to the deaths, it is also estimated that for every fatal overdose, there are 25–50 nonfatal overdoses, emphasizing that the drug epidemic is even more prevalent than generally cited and that it therefore affects millions of patients annually, let alone many more millions of immediate family and friends (9).

Beyond the sheer escalation of deaths and overdoses is also the evolving nature and frequency of the medical care challenges brought on by the current epidemic. In addition to the classic respiratory arrests and pulmonary edema seen with traditional heroin overdoses of the past, other complications, such as cardiac dysrhythmias, are now occurring more frequently, largely because of different formulations and complex chemistry, as in the case of loperamide overdose (9,11–13). In addition, there are more frequent clinical scenarios involving more prolonged and variable states of depressed mental status. In turn, this alteration in consciousness can be associated with other observed complications, including those ranging from related fall injuries, exposure hypothermia, and severe dehydration to ulcerative infections, rhabdomyolysis, and consequent azotemia (9,11–16). With escalating volumes of synthetic opioid–related cases and drug abuse disorders overall, such complications and electrocardiographic disturbances linked to rhabdomyolysis and associated hyperkalemia and hypercalcemia have now become more frequent, as have associated renal failure, compartment syndrome, and even paraplegia (9,11–16).

In addition, with polypharmacy and unknown or misrepresented substances being taken, opioid-related overdoses may not always present with the classic presentation of miosis. At the same time, anchor bias may now occur when pupillary constriction is observed. Differential diagnoses still should still be entertained that range from cholinergic toxicity and pontine hemorrhage to other neurologic processes—or even the combination of such conditions in certain environments (9).

Another part of the evolving challenges for emergency medical services (EMS) and other public safety agencies is the need for development of violence mitigation training programs, such as those recently developed in Detroit, Raleigh, Philadelphia, Oakland, Melbourne, and elsewhere (17–19). Techniques such as verbal judo, combined training with police, and undergoing joint simulated scenarios are concepts that have begun to address this additional challenge to EMS from the opioid/drug crisis (17–19).

Having described all of these concerning statistics, their impact, and the resulting training needs, many EMS systems and their medical communities and public health counterparts have recently begun to create new, collaborative, and even some successful inroads in terms of reducing the impact of this crisis and its human toll (20–37). For example, in Appendices I and II, 2 different illustrative models are provided from communities that had been heavily saturated with so-called “prescription mills” and later became prime sites for persons affected by opioid use disorders. These example initiatives reflect some of the variable solutions that dozens of EMS agencies have used in their attempts to contribute and facilitate proactive solutions.

The purpose of the following article is to provide a simple, annotated compilation of major recommendations for EMS systems with a specific focus on their roles in dealing with this global problem of drug addiction disorders, including the medical response and suggested initiatives to address this problem proactively with fellow stakeholders.

METHODS

Document Source

The Metropolitan Municipalities EMS Medical Directors Alliance is a voluntary consortium of the designated jurisdictional EMS medical directors for 62 of the most populous cities in the United States (37). It also includes the medical director of counterpart cities in Europe (e.g., Paris, London, Berlin, Milano, Hamburg, Copenhagen, Amsterdam, Manchester, and Belfast) and many other major cities globally as well as medical directors from key federal agencies and leadership from several related professional societies.

The group held a face-to-face meeting in Dallas, Texas, between February 28 and March 3, 2018, and subsequently between February 27 and March 2, 2019, with

78 attendees, during which time, going from one city to the next, participants discussed their respective regional issues, experiences, and solutions. In addition, there were multiple interspersed presentations with local data on current suggested initiatives and the role of EMS in those potential solutions.

One of the attending members provided a transcription of the proceedings and cataloged the recommendations of best practices. These notations were later displayed to the participants on an overhead screen and then, section after section, the participants provided group-wordsmithing, formatting. and language modifications from the floor.

Best practices from their respective communities were recognized and assimilated and annotated accordingly. The designated writing group subsequently drafted a document for sharing among the entire group of participants and their home agencies. Further discussion evolved by way of continued discussions through the group's email list, and final suggestions and clarifications were incorporated. A writing group reviewed the final draft document for accuracy, referencing and final editing.

In concept, the intent of the final manuscript was for information-sharing purposes and not necessarily to put

Table 1. Annotated Consensus Recommendations for Emergency Medical Services Agencies in Their Approach and Involvement With the Opioid/Drug Crisis

1) Overall, "opiate," "opioid," and other drug use disorders must be regarded as chronic, relapsing disease processes that have multifactorial causes requiring medical, psychological and logistical interventions to render more definitive long-term treatment and recovery.
2) In acute overdose, restoration of breathing with opioid-related respiratory compromise is paramount, and well-practiced skills with monitored assisted ventilatory support should become a primary responsibility and skill for all EMS responders along with the proper capability to provide that support.
3) Naloxone, a reversal medication administered to resuscitate victims of opioid overdose, can be life-saving to many of these patients and thus be administered in sufficient quantity to stabilize patient conditions, but it must also be administered in a judicious or restrained manner recognizing possible prior administration by bystanders and given some potential side effects, both medically (e.g., associated pulmonary edema) and operationally (e.g., an awakened patient now refusing care).
4) Personal protective equipment and practices are extremely important during any EMS response and, in the case of assessing for any kind of overdose, it is important for EMS providers to be particularly observant for their own potential risk of exposure to potent narcotics in certain circumstances and also the violence frequently encountered—with respective preparedness training provided.
5) There should be avoidance of anchor bias (clinical tunnel vision) and open-minded considerations of any historical and bystander information provided in such situations in order to maintain assessments for more complex situations, such as combined drug use, unknown drug use, and the environment accompanied by a careful physical examination and electrocardiographic evaluation/monitoring along with considering any other coexisting conditions, including related trauma, simultaneous neurologic event, or exposures (e.g., pontine hemorrhage or insecticides causing miosis).
6) Training and prospective planning with co-responding law enforcement agencies should be addressed and mapped out, particularly in communities where naloxone has been distributed to police and citizens at large and where any of these first responders themselves may be exposed to potent opioids or violence.
7) Data collection with regard to opioid and other drug-related overdoses/responses is a pivotal task and this invaluable information should be (responsibly and properly) shared with appropriate public health partners for the purpose of: a) identifying high-risk populations and known or newly observed complications; b) conducting epidemiologic surveillance regarding the types and combined types of drug usages and their presentations; and c) pinpointing geographic hotspots for drug overdose activity and any variation in temporal spikes in activity.
8) EMS personnel should receive training on the nature of addiction disorders and how best to communicate with those dealing with opioid and other drug use disorders (and their loved ones) in a manner that will best gain their confidence and encourage them to seek treatment along with alerting them to areas of referral and sustained recovery in their given community including on-the-spot communications with drug use disorder recovery experts.
9) The specific training regarding optimal communications with those with drug use disorders can even include positive recovery success stories and principles of addiction science, but the training should also be tailored to help EMS personnel comfortably provide supportive teachable moments after resuscitation and lucidity from an acute overdose scenario.
10) Resiliency training and monitoring of providers may be needed, particularly in EMS agencies with a high volume of overdose patients and, in others, just-in-time training may be needed following newly encountered epidemics in a given community.
11) EMS agencies should become part of the process for developing innovative approaches to this national/international problem, such as relevant community-based paramedic programs to provide pathways that can facilitate more definitive treatment, especially for those expressing a possible intent to recover from opioid and other drug use disorders and the cycle of recidivism and risk of death.
12) EMS agencies and providers should become familiar with reputable and evidence-based community resources that can guide patients into available treatment options, which may include outpatient programs or inpatient detoxification treatment as indicated.
13) Administratively, EMS agencies should responsibly educate their EMS providers in terms of the technical aspects of how to specifically make referrals to those programs that are available in their respective communities, and they should also provide their personnel with the indicated protocols to assist them in optimally routing affected patients into these programs as deemed appropriate by the medical and public health communities.
14) EMS agencies should continue to stay at a leading edge of innovation and partner with other organizations in their communities to help develop and create more reputable and evidence-based resources for opioid dependence intervention and rehabilitation, including medication-assisted treatment (MAT) programs, such as those that are currently evolving in many jurisdictions.
15) EMS agencies nationwide and globally should continue to collaborate and share data and local success and failure stories alike to help establish and promulgate best practices throughout the U.S. and worldwide.

forward a policy position paper as an authoritative body. Instead, the concept was to formulate a resource document and checklist, not only for the group's own use, but also one that could also be shared with others requesting help to guide their respective local and regional EMS system improvements (Table 1).

As described in Appendix III, any statements, publications, or educational offerings made by the group were not intended to represent either the positions or policies of their local respective agencies/municipalities nor any specific political or interest agenda, except that each participating individual wished to improve emergency health care worldwide based on the shared information.

RESULTS

Annotated Consensus Recommendations

1) Overall, "opiate," "opioid," and other drug use disorders must be regarded as chronic, relapsing disease processes that have multifactorial causes requiring medical, psychological, and logistical interventions to render more definitive long-term treatment and recovery.
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15) EMS agencies nationwide and globally should continue to collaborate and share data and local success and failure stories alike to help establish and promulgate best practices throughout the U.S. and worldwide.

DISCUSSION

While typically labeled the "opioid crisis," the current drug use disorder problem goes well beyond the traditional opiate dependence disorder and even the more contemporary escalation of synthetic opioid overdoses. Amphetamines and many other misused drugs are also major problems in many jurisdictions, and emergency care leaders and drug enforcement officials emphasize that the current problem is more of a nationwide/global drug epidemic and not just opioids in isolation (8,16). While deaths have indeed escalated, it is also estimated that for every fatal overdose there are 25–50 nonfatal overdoses, emphasizing that the drug epidemic is even more prevalent than is generally cited (9).

Among all drug overdose deaths, however, opioids as a whole were implicated in >33,215 deaths in 2015 (91 deaths/day), and this figure accelerated to 42,249 (115 deaths/day) in 2016, accounting for 66.4% of all drug overdose deaths (4,8,9). As previously noted, >60,000 persons died in 2016 from drug overdoses compared with 37,461 killed in U.S. car crashes during the same period and, among all drug overdoses, heroin-related deaths alone rose to 12,989 in 2015 (5–8). This was a 23% increase over 2014, a figure that exceeded the number of U.S. gun-related homicides (about 9,600 in 2015). This implies that millions of overdoses, fatal and nonfatal alike, are now likely occurring at record levels (6–9).

Citing only the death toll figures, the societal loss has become substantial. It is estimated that in 2016 there were 1.77 million years of life lost in the U.S. alone because of just the opioid death toll. While the largest absolute increase in opioid-related deaths between 2001 and 2016 (in terms of sheer numbers) occurred among those 25–34 years of age (a 15.8% increase), the burden of overdose among adults 55–64 years of age was also growing at a "concerning rate" in that the relative increase (754%) observed from 2001–2016 was the largest across all age groups (4). In addition, the geographic distributions and types of opioids were also evolving (8).

While the opiate, heroin, was traditionally considered the greatest contributor to opioid-related deaths, the opioid chemical, fentanyl, has emerged to become the largest drug threat in the U.S., being directly linked to 44 deaths every day in 2016 (10,38). First synthesized in Belgium in the late 1950s, fentanyl was introduced into medical practice in the 1960s as an intravenous anesthetic (trade name Sublimaze) that had an analgesic potency at least 40 times stronger than heroin and 80 times that of morphine (9,10,38).

Today, fentanyl and fentanyl analogs (e.g., acetylfentanyl, butyrylfentanyl, carfentanil, and U-47700) have become easily produced and distributed at exceptionally low cost to users, further amplifying the problem (8,9). Moreover, they are much more potent. For example, the fentanyl analog carfentanil has a potency that is 5–10,000 times that of morphine. With unpredictable quantities of the fentanyl analogs in given batches and uncontrolled mixtures with other substances, the overdose and complication rates have increased exponentially, and the physiologic manifestations have become more complex.

As primary medical first responders, however, EMS providers uniformly have been called to the scene of these tragedies with or without police and fire as the epidemic progressed. EMS health care providers have directly witnessed firsthand the increase in the drug overdose death rate and the associated sequelae (1–4,17–19). Perhaps the most worrisome and discouraging impact for EMS personnel has been psychological in that the opioid

abuse epidemic and its related toll has been most prevalent among young and otherwise healthy persons (4,21). While opioid abuse resulting in this premature loss of life is now being recognized by all as a major public health crisis, it has also taken a toll on EMS agency personnel, not only in terms of demands on resources and workloads, but also in terms of the stresses of continually witnessing these tragedies and also needing to be mindful regarding self-protection because of related personal violence and exposure to potent drug (4,17–27). Accordingly, the medical discipline of EMS has a special place within the collective of all interested parties hoping to provide solutions to the public health crisis of opioid use disorder and other drug-related epidemics.

As this most recent drug epidemic had rapidly evolved, EMS agencies were often inundated with frequent 9-1-1 responses. For some communities, this escalation of responses often became akin to an ongoing multiple casualty incident each time new batches of drugs were introduced into their communities nationwide (21–27). EMS has been routinely involved because they were regularly on the front lines trying to save lives and doing their best to reduce the impact on the death toll, as were many firefighters, police and volunteer first responders (21–27).

Therefore, in addition to intervening acutely to rescue potentially dying patients from real-time overdose events, EMS agencies must also be strongly invested in partnering with key stakeholders to develop mechanisms to end the repeating cycle of emergency rescue care followed almost immediately by return to drug use disorder behaviors and recurring subsequent overdoses.

Among potential roles in those community partnerships, the conclave of medical directors concluded that EMS providers should also be trained to optimally communicate and refer/re-direct the affected individuals and their family/friends to those appropriate resources that will provide viable and evidence-based pathways that might very well facilitate recovery from drug dependence disorders (36,37,39–42).

Evolving evidence, as indicated in the included sample list of references and appendices, has shown that EMS agencies working together with their public safety and public health partners can indeed create substantial risk reduction and subsequent improvement in the quality of life for these patients and their communities (36,37).

One additional recommendation, though more encompassing in scope, is to have our EMS agencies and crews provide a more ingrained culture of empathy for those with drug use disorders. As a partner and stakeholder in this public health challenge, EMS agencies and medical directors should work to reduce the traditional stigmas associated with opioid use disorder. This can even include the elimination of stigmatizing and anachronistic terms such as “narcotic abuser” and “drug addict” or terms like “opioid abuse” vs. “opioid use disorder.” Not only does a more empathetic perspective affect the potentially influential relationships that EMS providers might have with their individual patients, but also in terms of gaining support within their communities and fellow stakeholders at large.

Some Caveats

The primary discussion that generated this annotated report involved 76 participating municipal/county medical directors (among the many hundreds across the U.S. and elsewhere) sharing their own experiences along with other national leaders in EMS. The information was not based on formally collected data for this specified purpose but rather an informal inventory of potential “best practices” (39). In addition, the regional experiences and number of opioid cases alone were quite variable depending on the jurisdiction. In fact, the group emphasized that the current subject and national conversation should be relabeled as the “national drug crisis/epidemic” of which opioids play a large part but not an exclusive role.

Nevertheless, being high-volume systems, the participating cities where the opioid epidemic had hit hard were able to relate their “robust” experience with the evolving face of the current opioid and overall drug epidemic compared to previous traditional overdose experiences. Not only are the EMS crews uniformly reporting and commonly relating a renewed challenge from undifferentiated polytoxicologic agents’ actions, nontraditional electrocardiographic disturbances, increased rhabdomyolysis, but, one after the other, the participants also reported increased risks for their EMS personnel, particularly in terms of enduring personal violence and other circumstantial threats in these related situations.

Depending on local resources and relationships with receiving facilities, some EMS systems have now tempered their use of naloxone as inferred in the third annotated recommendation. While more expanded discussions exist elsewhere, some EMS agencies and their medical directors, now armed with pulse-oximeters and end-tidal CO_2 monitors, have recently focused more on securing the airway and providing adequate assisted breathing and not naloxone. In that approach, if oxygenation and ventilation are adequately supported, patients are transported with minimal prehospital use of naloxone. This strategy might even include deferring naloxone use altogether until safe delivery of the patient to the receiving facility where attempts at of awakening may be better controlled. In addition, that approach may further mitigate refusal of transport and thus better enable the subsequent opportunities for recovery strategies provided at those hospital systems.

All of these discussions permitted the creation of a pragmatic roadmap for a best practices checklist for all EMS systems, both in the present and in the future, regardless of the lack of precise data at the moment. At the same time, the group did charge themselves with creating a more standardized data collection approach to better document and compare the regional epidemiologic pictures and how they may change over time. That documentation was also encouraged to better delineate the frequency of complications and even nontraditional findings. Regardless, whether a given drug mixture or electrocardiographic disturbance is more frequent or uncommon in a given locale, they still must be assessed and monitored accordingly in this new era of EMS care of drug overdose.

It should also be emphasized that while some of the cited successes demonstrated in some of the larger city reports may not be reproducible elsewhere, they still should prompt others not to maintain the status quo and to explore potential innovative roles for EMS that may very well help to significantly mitigate the crisis in the foreseeable future and also serve as a model for others (33–37).

One final caveat is that while there is a finite risk to rescuers who are exposed to the powerful synthetic opioids, the risks can be negligible with proper procedures, preparations, and training. EMS agencies need to familiarize themselves with current recommendations and coordinate preparations and training with other potential first responders as well (43).

CONCLUSIONS

Beyond improved acute medical rescue practices and improved assessment techniques, EMS agencies must also closely partner with key stakeholders to develop mechanisms to end the pervasive repeating cycle of emergency care interventions followed by immediate return to drug dependence behaviors, life-threatening overdoses, and related complications.

EMS providers should learn to optimally communicate, encourage and facilitate a continuity of interventional care for the affected individuals using the appropriate resources that will provide viable, evidence-based pathways toward sustained recovery from this difficult challenge of drug use disorder.

APPENDIX I: EXAMPLE COLLABORATIVE EFFORTS BETWEEN EMERGENCY MEDICAL SERVICES AGENCIES AND OTHER COMMUNITY STAKEHOLDERS

Two programs discussed at length by the consensus team were the efforts being conducted in Columbus, Ohio, and those in Palm Beach County, Florida, where the epidemic had struck early and had significant impact.

In the case of the Columbus Division of Fire (Columbus, Ohio) several programs were developed to engage and manage patients with opioid use disorder. For example, partnering with a mental health agency, they established the "RREACT" (Rapid Response Emergency Addiction and Crisis Team) initiative. For those cases in which opioid overdose patients respond to naloxone but may not need (or otherwise decline) transport to an emergency department (ED), the RREACT, consisting of a specialized responding firefighter/police officer team, assists with direct referral for those who want to seek addiction treatment.

The goal of this program is not only to decrease ED transports, diminish out-of-service time periods for EMS vehicles, and reduce compassion fatigue in EMS providers, it is intended to increase the coordination of more definitive follow-up patient care. More specifically, the responding RREACT members facilitate the linkage between those with opioid use disorder and appropriate recovery resources and they also increase patient and family awareness of harm reduction services. As indicated, they expedite access to naloxone kits and related training for family and friends. Since inception of RREACT, Columbus has continued to focus upon, develop, and research best practices for enhanced community care coordination.

In that respect, Columbus also recently engaged addiction professionals within the community to help set up the Maryhaven Addiction Stabilization Center (34,35). This center, refurbished from a former hospital facility, contains a 5-bed ED and 55 inpatient beds for detoxification. This facility now serves as a primary receiving facility where EMS can transport patients directly who are medically stable and who are seeking treatment for their opioid addiction.

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APPENDIX II: SECOND EXAMPLE OF COLLABORATIVE EFFORTS BETWEEN EMERGENCY MEDICAL SERVICES AGENCIES AND OTHER COMMUNITY STAKEHOLDERS

Another example of an EMS jurisdiction that was challenged with high volumes of opioid-related overdoses and accompanying repeat overdose occurrences was Palm Beach County, Florida. Coordinated by Palm Beach County Fire Rescue (PBCFR), a partnership was formed with one of the local tertiary care centers that receives many opioid overdoses as well as the local health care district and specialists in addiction services. The specific aim of this partnership was to demonstrate the ability to mitigate the repetitive nature of drug-related overdoses and the accompanying risk of death by identifying and providing those patients with a longitudinal system of highly coordinated care involving an acute outpatient medication assisted treatment (MAT) program that is directly facilitated and managed by a team of community-based paramedics (CPs) during the most vulnerable phases for relapse, namely the first week after ED treatment.

The studied system of coordinated care has included an initial ED-based phase involving a brief intervention and referral to treatment followed immediately by outpatient access to a closely supervised MAT bridging program facilitated and managed by the team of CPs.

Over this pivotal second phase, implemented during that high-risk first week, the CPs supply a daily administration of buprenorphine-naloxone combination therapy (Suboxone) and they coordinate follow-up with peer support counselors. The CPs then ensure a "warm" and highly coordinated hand-off for seamless continuity of care with an established MAT program provided by psychiatry and internal medicine specialists.

In this study, the success rate for treatment compliance has been measured by way of a follow-up project that includes drug testing for both opioid and Suboxone metabolites. Preliminary results already indicate a strong rate of success with compliance based on hard objective data (actual drug tests as far out as 1 year vs. unsupported subjective reports of being drug-free from the patients). In addition, as in Columbus, similar efforts to establish an addiction treatment receiving facility are already underway in Palm Beach County as well.

APPENDIX III: SOURCE AND PURPOSE OF THE DOCUMENT

The intended endpoint of this document was information-sharing among individual members of the participating group. Those developing the document do not consider themselves to be part of an official organizational structure and there are no governing by-laws, dues, officers, policy-making committees, or any binding obligations except for the mission-driven sharing of information and to create a cohesive collaboration (as indicated) for major disasters, day-to-day 911/999/112/113 response practices, and any other given public health threats involving emergency medical services (EMS).

In that respect, the work product of the participants should therefore be understood as the combined, shared opinion of a discussion panel of medical directors from large, high-volume systems regarding optimal EMS medical management and care delivery. In addition to having the opportunity for regular open discussion and personal collaboration on this subject, they also aid each other day-to-day in terms of the public safety needs for the tens of millions whom they serve.

Each of the participants consider themselves to be active members of their own professional societies (e.g., the American College of Emergency Physicians, American Academy of Emergency Medicine, National Association of EMS Physicians, etc.) as well as their local governments/communities. They consider their collective alliance as a pragmatic resource serving all of the above. Therefore, while the following statements were developed largely for the team's internal purposes, they are also open for use by any other responsible entity that may be able to use them to benefit our patients.