ANNEX 1: SPECIFIC GUIDANCE FOR EMERGENCY MEDICAL SERVICES AND MEDICAL CONTROL AUTHORITIES

Introduction

The allocation of resources and services during emergency-induced situations of scarcity must be based on a sound ethical framework. This attachment provides specific guidance to actors and entities functioning in Emergency Medical Service (EMS) agencies and Medical Control Authorities (MCA), to assist these actor entities in planning for resource and service scarcity that may arise during public health emergencies. This attachment applies the general ethical guidance offered in the Ethical Guidelines for Allocation of Scarce Medical Resource and Services during Public Health Emergencies in Michigan (Guidelines) to the specific context of EMS and addresses in detail some considerations that may arise in this context. It also offers potential strategies for implementation of the Guidelines in the EMS setting.

EMS agencies and Medical Control Authorities should review the ethical framework presented in the Guidelines to ensure that their decision-making strategies for allocating scarce resources and services during public health emergencies comport with the principles and considerations outlined in the Guidelines.

These Guidelines are not envisioned as a formalized series of instructions but rather a set of criteria that can be employed by decision-makers in various circumstances during a public health emergency using their best professional discretion. Thus, the criteria offered within these Guidelines are meant to be malleable, adaptable, and functional. It is presumed that many hospitals and healthcare facilities will adapt the approaches and strategies contained in this document, tailored to fit the circumstances of their specific facility.

Extreme or unforeseeable circumstances may challenge the foundations of the framework. In those situations, decision-makers will be expected to use their professional training and prudence to guide allocation decisions. The criteria offered may have to be amended to address unforeseen circumstances and should be periodically reviewed and updated to incorporate new information. Successful implementation of the Guidelines will demand ongoing deliberation, transparency, public education and input, and careful evaluation and oversight.

Background

Public health emergencies have often led to scarcity of medical resources and services. The history of epidemic outbreaks, natural disasters, and other mass casualty events has demonstrated the need to prepare for medical surge planning across all medical disciplines and systems. These types of public health emergencies could seriously impact the State of Michigan, its health care and public health systems, its transportation systems, its economy, and its social structure. Emergency medical services

(EMS) will be faced with higher demands for services. EMS will experience problems similar to other health systems across the State, such as increased employee absenteeism, disruption of the supply chain and increased rates of illness and death. Public Safety Answering Points (PSAP) or 9-1-1 dispatch centers serve as the public's point of access to EMS, law enforcement, and fire services, as well as an avenue for requesting many other services. Ensuring both the dispatch centers and EMS are well-integrated into medical surge planning and response is essential to the health and safety of the citizens in a public health emergency.

The EMS and PSAP/9-1-1 Systems will be part of a group of medical providers that will have to decide how they will respond to a significant influx of patients during and incident. It is of the utmost importance that they have all of the tools necessary to make ethically sound and important decisions with regard to allocation of scarce medical resources and services. The objectives discussed in this attachment will assist local and regional responders in making important decisions that protect the lives and safety of both responders and patients alike.

Ethical Framework

The Guidelines developed for the State of Michigan discuss in detail the principles and methods used to develop the ethical framework. This attachment to that document endorses the same goals, ethical considerations, and allocation criteria. Several specific ethical considerations are highlighted below.

- > Professional obligations to individual patients
- > Professional and institutional obligations of competence
- > Professional and institutional obligations of honesty and transparency
- > Distributive justice, including equal treatment, utility
- Fair procedures, including in planning and implementation
- ➤ Accountability and legitimacy

Each of the above ethical considerations applies to the overarching aim of the document, which is the distribution of scarce medical resources and services in an ethical fashion within EMS and MCA settings. Planning and preparation of health care professionals working in EMS settings to respond ethically to situations of resource scarcity underlie both professional and systemic obligations to provide competent and just care to patients. Preparing the community for the types of difficult allocation decisions that may arise through public engagement and education supports obligations of honesty and transparency, and adds legitimacy to and accountability for these difficult decisions if they need to be made in the future. Distributive justice cautions against the possibility of applying different criteria to allocation schemes across different systems and communities. Cooperation between Medical Control Authorities, EMS systems, and hospitals, and developing consistent allocation guidelines, by contrast, supports fairness and distributive justice. Prudent planning to increase stores of certain items proactively can avoid unnecessary shortages and is key to ethical planning. The protection of disabled and marginalized individuals in these circumstances is imperative. Therefore,

criteria related to an individual's social utility and expected longevity to make allocation decisions should not occur.

The EMS Ethical Obligation

The National Association of Emergency Medical Services Physicians (NAEMSP) has outlined a number of important ethical obligations for EMS systems that hold themselves out to community as emergency response networks and those working within these systems. EMS systems assume the important ethical duty to respond "regardless of the patient's income or social position. Care must not be limited to any specific group or class of people." EMS responders have a duty to provide medically acceptable care to all, consistent with the standards of the EMS system. ¹

EMS often determines priorities of care according to severity. During a public health emergency, EMS must adhere to set protocols and sound medical information, which may result in delaying or refusing transport for patients with minimal illnesses. In developing this triage system, EMS must take into account equitable considerations to ensure fairness and avoid arbitrariness in allocation decisions, while allowing for adequate response to the ill and injured. As noted by the NAEMSP, "when planned appropriately, EMS might be regarded as one of the most fair of health care institutions."²

Beyond treatment, EMS personnel commonly deal with situations which require them to take on differing roles, which can create further ethical dilemmas. The EMS provider "must frequently interact and negotiate with reluctant patients, counsel those patients who ask for advice or refuse care, address requests for limitation of resuscitation, assume some degree of personal risk in the care of agitated, uncooperative, or infectious patients, deal with social and psychiatric challenges, and respond to a variety of unusual requests which may not be medical in nature." NAEMSP has recognized three ethical principles that are meant to govern EMS personnel in their delivery of care. "The principle of justice implies that the system be fair and equitable. The principle of beneficence requires that actions and intentions are in the best interest of the patient. Respect for patient autonomy dictates that the requests of the patient are honored and nothing is done which is contrary to the wishes of the patient."

Training alone does not prepare the EMS provider to deal with ethical situations. Many learn by experience; prehospital providers are guided by clearly defined protocols. Coupling the above principles with established EMS protocols and educating EMS

³ Id.

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¹ Ethics Committee, National Association of Emergency Medical Services Physicians, Ethical Challenges in Emergency Medical Services *Prehospital and Disaster Medicine*, April-June, 1993. http://www.naemsp.org/documents/EthicalChallengesinEmergencyMedicalServices.pdf

² Id.

providers about ethical conflicts that may arise should promote the appropriate ethical resolution of dilemmas encountered by those who provide and direct EMS care during public health emergencies.

Duty to Provide Care

EMS systems provide the community with important health care services, while presenting a unique and challenging environment for providers of these services. NAEMSP states that "[t]he primary mission of EMS is the reduction of patient morbidity and mortality through the delivery of fast and efficient highly specialized care." EMS systems have a duty to provide care to the community as they pursue this mission. This duty applies across the spectrum of EMS services and from the moment a patient contacts 9-1-1, through dispatch, treatment, transportation, and release.

In order to limit potential ethical conflicts, EMS systems must establish policies and protocols that outline the duties of their personnel. The more clear these policies and protocols, the greater the likelihood of ethically sound care. These policies should include, when appropriate, assurances that EMS personnel will have access to adequate equipment and training, offer timely and safe response, and provide patients with medically acceptable care, together, these policies outline the primary ethical duties of an EMS system. Additionally, the NAEMSP notes that an EMS system has an additional "duty to meet the commitments which it undertakes" for the safety of patients and providers.⁵

EMS agencies should coordinate with other health care providers and public health authorities to ascertain the scope of their responsibility for providing services in the community, including their role in providing emergency situation mitigation measures. EMS agencies should develop contingency plans to account for situation in which community mitigation strategies have varying levels of effectiveness. Moreover, public health and EMS planners should be aware of ethical considerations surrounding decisions that may affect public perceptions and response to community mitigation strategies.

Illness, absenteeism, increased workload, and death during a public health emergency may impact an EMS agency's ability to satisfy demand for services. Planned flexibility in staffing patterns, recruitment, and just-in-time training programs may help augment the EMS workforce. As the provider of emergency medical triage in the prehospital setting, along with treatment and transport, EMS plays an important role in every community's efforts to reduce morbidity and mortality from all sudden illness and injury. 6

⁴ <u>Id.</u> <u>1d.</u>

⁶ Id.

The normal standard of care during an emergency response can be understood as requiring caregivers to provide "all appropriate health and medical resources" that may be available to benefit of each patient. However, according to the Agency for Healthcare Research and Quality (AHRQ); "should a mass casualty event occur, the demand for care provided in accordance with current standards would exceed system resources." The definition of "mass casualty" can change dramatically given the context of the event. What may be deemed a manageable incident in a large metropolitan area could be insurmountable number to treat in a small rural hospital. When an emergency causes injuries number far above what the system is capable of managing, altered standards of care may need to be implemented in order to preserve the system and mitigate morbidity and mortality. As the AHRQ goes on to note, "[i]t may also be necessary to create both pre-hospital operations and alternate care sites to supplement hospital care."

There is no generally accepted definition of "altered standards of care". However, this concept is typically interpreted to adjust the focus of care and allocation criteria from saving individuals to preserving the greatest number of patients possible under the circumstances. Meeting this goal could implicate a number of varying strategies, from the implementation of triage standards, to altering the criteria for who receives vaccinations, to using a school or other non-medical facility as a hospital alternative due to overflow. ² Altered standards of care also may involve "changing who provides various kinds of care or changing privacy and confidentially protections temporarily". ⁸

Efforts to develop ethically sound standards of care that allow EMS providers to deviate from their established, day-to-day treatment protocols support the evolving role of EMS while still providing for appropriate patient care. The State of Michigan will support regional and local EMS in establishing altered standards of care to legally deviate from everyday treatment protocols during response to a public health emergency and will support mitigation of and response to affected patients. EMS plans should identify sufficient State legislative authority, administrative rules/regulations, and liability protection to support the role of EMS providers during public health emergencies. The Medical Control Authority should provide for a system in which the treatment and protocols that EMS providers are authorized to use may be modified to reflect the evolving roles of EMS providers during an emergency incident that requires scarce medical resources. During this time the Medical Control Authority should assure medical direction, appropriate education, and quality assurance. EMS agencies and providers should, through protocol, coordinate with their EMS Medical Directors, and working with local healthcare facilities, provide just-in-time training for their responders during times of public health emergencies. The practice of EMS providers should be based on the most up-to-date clinical recommendations and treatment protocols/information from appropriate medical and public health authorities.

⁷ http://www.ahrq.gov/research/altstand/altstand2.htm

⁸ http://www.ahrq.gov/research/altstand/altstand2.htm

It is virtually impossible to create a scope of practice that takes into account every unique situation, extraordinary circumstance, and possible practice situation. This is further complicated by the fact that EMS personnel are an essential component of disaster preparedness and response. In many cases, EMS personnel are the only medically trained individuals at the scene of a disaster when other healthcare resources may be overwhelmed. If predictions about the surge of patients and the concomitant increase in absenteeism among EMS personnel become a reality, EMS providers' regular day-to-day practices may need to be modified during times of medical surge. 9

Ethical Resource and Service Allocation Decision Process

Public health emergencies may require EMS providers to prioritize access to services for those patients most likely to benefit from evaluation and treatment. Ensuring adherence to this strategy may require EMS systems to alter standards of care to reflect the circumstances of each incident, including in some cases the adoption of patient triage and service protocols. The Medical Control Authority will determine the EMS standard of care stage in response to the situation and any alterations in standards of care will apply to the EMS agencies in that Medical Control Authority. Section 20919 of the Public Health Code requires each Medical Control Authority in the State of Michigan to establish written protocols. The protocols, once adopted by the MCA and approved by MDCH have the force and effect of law. "Licensed life support agencies and individuals are accountable to the MCA in the provision of emergency medical services as defined in protocols. Each participating and non-participating hospital within a MCA region shall follow all standards, policies, procedures, and protocols established by the MCA as approved by the Department. Each MCA shall submit to the department current protocols for department review and approval."10

Table 1. EMS procedures will follow the schedule below:

| EMS Standard of Care Staging ¹¹ | Stage - Green 911 communications and/or pre-hospital response systems and/or hospitals at or near capacity | Stage - Yellow 911 communications and/or pre-hospital response systems and/or hospitals beyond capacity | Stage - Red 911 communications and/or pre-hospital response systems and/or hospitals and surge systems beyond capacity |
|---|--|---|--|
| Expansion of EMS personnel | Combining services or cross coverage | Use of Echo car or triage officer | Use of medical first responder or CERT volunteers |
| Implementation of alternate transport | See Response Triage Table 2 | See Response Triage Table 2 | See Response Triage Table 2 |
| Implementation of treat and release protocols | See Response Triage Table 2 | See Response Triage Table 2 | See Response Triage Table 2 |

¹⁰ http://michigan.gov/mdch/0,1607,7-132-2946 5093_28508-132260--,00.html

¹¹ Adapted from the "North Dakota EMS, Emergency Medical Service Pandemic Surge Protocols and Public Safety Answering Point Pandemic Surge Protocols", 2010, http://www.ndhealth.gov/EPR/Publications/EMS-PSAP-Stages-for-Standards-of-care2.pdf

| Single responder vehicles | No | Yes | Yes |
|---------------------------|-----|-----|-----|
| Call Triage | Yes | Yes | Yes |

Response Triage No Caller Notification Emergent Calls Only

EMS PROTOCOLS: Scope and Applicability¹²

The protocols presented in this document apply to public health emergencies in which there is a sustained shortage of EMS services and personnel. Plans exist to identify resources available locally through the Medical Control Authorities (MCA), regionally through the Medical Coordination Centers (MCC), and statewide through the Community Health Emergency Coordination Center (CHECC) in coordination with the State Emergency Operations Center (SEOC). When all Michigan based resources are exhausted, the state may request Federal assistance through the SEOC. Mobilization of external resources through mutual aid from local and regional partners to supplement EMS services in localized areas of disaster is the preferred approach.

This document addresses a few specific protocols related to the delivery of care by EMS during a public health emergency. The first protocol addresses patient triage, which includes alternate forms of transport and the treatment and release of patients. The second protocol covers management of resources by standard of care staging, which includes personal protective equipment and antiviral distribution and use, the role of first responders, and the responsibilities of triage officers.

Assumptions Related to Pandemic Influenza or other Infectious Agents

During a pandemic influenza outbreak there will be some assumptions that must be taken into account in order for EMS personnel to prepare. First, a moderate to severe outbreak has the potential to overwhelm health care providers and available resources will be inadequate to serve the number of patients needing care, resulting in prioritization and rationing. Moreover, the number of calls being received by 911 dispatchers will greatly increase, which in turn will markedly increase the number of responses requested of EMS. These calls are likely to be primarily health related, although public safety calls may also increase depending on the situation. The number of workers available to staff EMS and 911 call centers will probably dwindle as a result of the spread of illness (whether due to infection of workers themselves or secondary reasons, such as school closures or responsibilities to care for ill family members). Workforce shortages may have an especially severe impact on service capacity in rural areas, since personnel fulfilling EMS and phone operations in these areas are often volunteers or very few in number to begin with. Emergency planning efforts must account for these anticipated staffing shortages.

¹² This section of the document is adapted from the document "Emergency Medical Service Pandemic Surge Protocols and Public Safety Answering Point Pandemic Surge Protocols," published in 2010 by North Dakota's EMS.

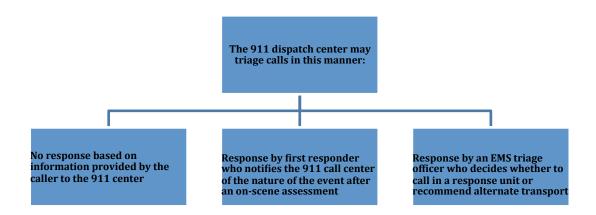
Assumptions Related to Other Public Health Emergencies

EMS Standard of Care

As discussed above, overloading of the EMS system is a significant risk during a public health emergency, resulting from an increase in patients and a potential decrease in available staff. Should this occur, the MCA may adopt altered standards of care to guide EMS systems in their response decisions. For example, an emergency protocol may implement a system of prioritization based on the condition reported to the operator of an emergency call, which determines whether EMS personnel should initiate an on-scene response. Another example would be a protocol that allows EMS personnel on-scene to determine the level of care required based on patient assessment. A third example would consider modifying the usual staffing requirements, recognizing the increased workload and limitations on response due to limited availability of personnel and other resources. Other emergency protocols not described here may be appropriate to implement as well. Several specific scenarios are described in the sections that follow.

Triage of On-Scene Response by Standard of Care Stage

The most effective way to reduce the workload on EMS systems during a moderate or severe public health emergency is to limit the number of calls that must be responded to by EMS personnel. As noted above, during a public health emergency, the altered standard of care allows for such decisions to be made ethically. The diagram below identifies three scenarios under which a 911 dispatcher may triage calls consistent with the standard of care.



The content of the call and the availability of resources at the time will dictate which of the above response methods are appropriate for the call center to use. Triage decisions should be made with a goal of ensuring the best possible resource allocation

with the available information Table 2, on the following page, outlines in detail a prioritization scheme to be applied to pre-scene information during public health emergencies. If the nature of the call is consistent with a response priority of zero, the PSAP/911 call center may choose not to send an EMS response. Although, the dispatcher's decision may have to be made with less than complete information obtained from the caller, the presence of a first responder or triage officer at the scene may improve the assessment of relevant circumstances to assist the dispatcher in making this decision. If the information comes into the PSAP/911 call center from an unreliable source, such as a child or intoxicated person, the decision to not send emergency responders would probably not be suitable. The distance between the responding unit and the response area also may be taken into consideration in making a response decision because of the extended time commitment of resources required when the response area is further from the responding unit. Additionally, in situations where an EMS system is faced with more severe emergencies requiring immediate assistance than it can handle, the system should request that the 911 call center identify additional EMS resources from existing mutual aid agreements that can respond immediately.

Table 2. Response Triage Based Information Available Pre-Scene to be Utilized by 911

Dispatch Centers¹³

| St | esponse Triage by tandard of Care ¹⁴ atient Categories | Stage - Green | Stage - Yellow | Stage - Red |
|----|--|--|---|---|
| 1 | Cardiac Arrest | Priority 1 Current Standards of Care | Priority 1 Current Standards of Care | Priority 0 Adult - No response Pediatric- Priority 1 |
| 1 | Life threatening event, threatening scene* | Priority 1 Current Standards of Care | Priority 1 Current Standards of Care | Priority 1 * Alternate transport considerations if EMS is delayed anticipated |
| 2 | Life threatening event, non-threatening scene | Priority 2 Current Standards of Care | Priority 2 Current Standards of Care | Priority 2 * Alternate transport considerations if EMS is delayed anticipated |
| 2 | Non-critical ALS assessment | Priority 2 Current Standards of Care | Priority 3 Alternate transport considerations | Priority 3 Alternate transport considerations |
| 2 | Inter-facility transport unstable patient | Priority 2 Current Standards of Care | Priority 2 Current Standards of Care | Priority 3 Current Standards of Care |

 $^{13 \\} http://www.ndhealth.gov/EPR/Publications/EMS-PSAP-Stages-for-Standards-of-care 2.pdf$

The responding unit may ascertain whether sufficient resources are available to permit a higher level of care than that authorized by the state-recognized disaster standard of care. Alternatively, the EMS provider may implement a policy adopting the state-recognized disaster standard of care thereby designating that sufficient resources are not available to provide a higher level of care.

| 3 | BLS | Priority 3 | Priority 3 | Priority 4 |
|---|--------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| | Assessment/ unknown scene risk | Alternate transport considerations | Treat and Release considerations | Treat and release considerations |
| 3 | Inter-facility | Priority 3 | Priority 3 | Priority 4 |
| | transport | Current Standards of | Alternate transport | Alternate transport |
| | stable patient | Care | considerations | considerations |
| 3 | BLS Treatment | Priority 3 | Priority 4 | Priority 4 |
| | | Alternate transport considerations | Treat and release considerations | Treat and release considerations |
| 4 | No acute illness | Priority 3 | Priority 4 | Priority 4 |
| | or injury | Refer call, no on-scene | Refer call, no on-scene | Refer call, no on- |
| | | response | response | scene response |

^{*}Threatening scene is a location in which the scene poses a potential danger to the health of the injured or ill person independent of the injury or illness itself (e.g., cold environment) or in which the person is trapped or pined.

Treat and Release

In simplest term, treat and release, is just as it sounds. After assessment, or treatment of a patient on site, the EMS unit decides no further treatment is required and does not transport the patient to a hospital or care facility. While the patient is free to pursue further care on their own, the EMS unit is under no obligation to provide transportation, even if no alternative transportation is available. Treat and release provides the patient with an assessment and adequate treatment on-site, yet does not prevent EMS personnel from responding to other calls. Thus, treat and release may be utilized to preserve scarce resources for patients, and does not prevent the patient from pursuing further care independently.

There are several criteria that must be met before treat and release can be incorporated into EMS response. The Governor must declare a disaster, the protocols written by the MCA must include treat and release as an acceptable option, and EMS personnel must not identify any "illness or injury likely to result in patient harm" if not transported to a hospital (or other health care provider) immediately. If all of the above conditions occur, after thorough evaluation and treatment of the patient, EMS personnel may release the patient and move on to other responses.

Several alternative scenarios may challenge the straightforward treat and release criteria described above.

- If patient refuses treatment but other criteria are met for treat and release, patient may be released without treatment.
- If treat and release is not advisable, but resource constraints are severe, the next alternative is assessment for alternative transport.

^{*}Priority One -Serious Life Threat Priority Two – Life Threatening Priority Three- Potential Life Threat Priority Four- Non life threatening¹⁵

¹⁵ Clawson JJ: Emergency Medical Dispatching. *In: Principles of EMS Systems*. Rousch WR,

- EMS personnel unit always have the option to transport assuming resources permit.
- If transport is not available on scene, EMS provider may conclude that the patient can be left pending arrival of the transport based if the conditions are sufficiently safe.

The utilization of the treat and release protocol also is subject to some limitations to ensure that no patient suffers as a result of over-use of this response protocol.

- Use of this protocol assumes that patients are provided the highest level of care available given resource scarcity.
- Application of the treat and release protocol is optional, not mandatory. Responding EMS personnel may employ this protocol under certain situations as defined by the MCA. However, the decision to employ this protocol comes within the judgment of the EMS personnel.

Alternate Transport

The alternate transport protocol is an option that may be available in some treat and release situations. This protocol is meant to cover patients in need of immediate assistance from a health care provider, as determined by EMS personnel on-site. Thus, these patients need a higher level of care than patients meeting the treat and release criteria. Under this protocol, an alternative vehicle—operated by a family member, friend, or first responder—can be used to transport the patient instead of an EMS vehicle. Use of alternate transport ensures that EMS vehicles are available to respond to more urgent emergencies, or patients with higher medical priority.

The criteria applied to the alternate transport protocol resemble those necessary to employ the treat and release protocol. The Governor must declare a disaster, the MCA protocols must specify alternate transport as an acceptable option, and the patient cannot have an illness or injury requiring treatment to prevent complications during the few hours after evaluation. Once these three criteria are met the EMS unit must identify the alternate vehicle. This can be any vehicle, operated by a person acceptable to the patient, and capable of safely transporting the patient in a medically sound manner given the patient's condition. The action steps listed below (modified from the North Dakota "EMS – PSAP Stages for Standards of Care") outline criteria for assessment of the appropriateness of alternate transport.

Assessment for Alternate Transport and Action Steps

- Patient evaluation suggests that alternate transport is available within a reasonable time frame;
- A person can be identified with a vehicle who is willing to transport the patient and can be reliably expected to do so;
- The transport vehicle has sufficient room for the patient
- If transport is not available on scene, the EMS provider may assess whether the patient can be left pending arrival of the transport based on the Safety of the scene

- Full expectation that the transportation will occur in a timely manner (reliability); and,
- No anticipated problem with patient loading into the transport vehicle. ¹⁶

Single Responders and Triage Officers

Single Responder

During public health emergencies where a shortage of EMS personnel exists, EMS systems may opt to send only one responder per vehicle in order to maximize the available resources. These single responders should be professionals (not untrained volunteers). Indeed, any use of untrained volunteers is not considered EMS response. However, when using a single responder does become necessary, that responder may call in a second person to assist with certain actions (e.g., loading a patient, driving the truck if the EMS provider must remain with the patient). The second person assisting with patient care should use the same PPE (personal protective equipment) used by the EMS responder.

Triage Officer

A Medical Control Authority and 911 dispatch center may coordinate to use a triage officer as a single responder on-site. This responder is meant to function as a typically EMS responder in assessing for triage, treating and stabilizing, but not in transporting the patients. After assessment, and treatment, the triage officer can make a transport decision, either by calling in an EMS vehicle, releasing the patient, or finding alternate transport. Because a triage officer does not provide transport, use should be limited to situations where transport is not expected given the call, or to severe emergencies where their role will be assessment and treatment pending arrival of transporting units.

Personal Protective Equipment Use during a Pandemic, Infectious or Biological Event

911 Dispatch Center Screening

Because responding EMS units may be exposed to people with transmissible respiratory illnesses, the State of Michigan may recommend that all calls to 911 that are requesting EMS response include a single screening question for respiratory illness. For example, a screening question could inquire "*Does the patient have a cough or fever?*" (This question may be adjusted depending on the infectious agent involved). This

 $^{16\\}http://www.ndhealth.gov/EPR/Publications/EMS-PSAP-Stages-for-Standards-of-care2.pdf$

screening question can provide EMS responders with information they need to reduce the threat of the infection.

EMS Notification

An affirmative answer to the screening questions should cue the dispatcher to notify the EMS responders of the potential exposure. EMS personnel should incorporate the appropriate PPE, if available, per their Medical Control Authority Protocols. Should the responders become aware of a possible acute respiratory illness on-scene, respiratory protection should be utilized. Further, if the Medical Control Authority notifies the 911 dispatcher that the prevalence of the respiratory illness in the community is sufficiently high to make the screening question unnecessary, EMS responders should wear respiratory protection consistently to every response.

Antivirals/Chemoprophylaxis

While treatment and post-exposure chemoprophylaxis with antivirals, antibiotics, or vaccines are feasible strategies for protecting our health care workers, pre-exposure prophylaxis an entire prehospital workforce may be prohibitive due to lack of resources. As a result the following protocol has been proposed for the use of antivirals for hospital staff:

Assumptions:

- Limited or no vaccine will be available to protect staff exposed to influenza patients.
- Personal Protective Equipment will provide adequate protection against influenza if used properly and is available.
- Antivirals have little effect if administered 48 hours after the onset of influenza symptoms (fever, myalgias, and cough)..
- Certain staff on flu wards (eg; ED and at the Alternate Care Centers) will be at a much higher risk of becoming infected.
- Staff might not present to work if they are not afforded adequate protection.

REFERENCES

Code of Virginia, §32.1-111, §32.1-116.3, 44-146.17, § 44-146.23.

<u>Commonwealth of Virginia Emergency Operations Plan (COVEOP)</u>; *ESF #8 Annex – Health and Medical Services*, September 2007

Commonwealth of Virginia, Virginia Department of Health, Pandemic Influenza Vaccine Delivery and Distribution Plan, 15 November 2007

Emergency Medical Services and Non-Emergent (Medical) Transport Organizations Pandemic Influenza Planning Checklist; Healthcare Planning Checklists, www.pandemicflu.gov

EMS Pandemic Influenza Guidelines for Statewide Adoption; US Department of Transportation, May 3, 2007

Homeland Security Exercise and Evaluation Program (HSEEP); http://www.hseep.dhs.gov.

National Response Framework; US Homeland Security, March 22, 2008

<u>Preparing for Pandemic Influenza: Recommendations for Protocol Development for 9-1-1 Personnel and Public Safety Answering Points (PSAPs)</u>; US Department of Transportation, May 3, 2007

Ethics Committee, National Association of Emergency Medical Services Physicians, Ethical Challenges in Emergency Medical Services *Prehospital and Disaster Medicine*, April-June, 1993.

http://www.naemsp.org/documents/EthicalChallengesinEmergencyMedicalServices.pdf

North Dakota EMS, Emergency Medical Service Pandemic Surge Protocols and Public Safety Answering Point Pandemic Surge Protocols, 2010. http://www.ndhealth.gov/EPR/Publications/EMS-PSAP-Stages-for-Standards-of-care2.pdf

Agency for Health Research and Quality, Altered Standards of Care in Mass Casualty Events: Bioterrorism and Other Public Health Emergencies, Chapter 2 (2005). http://www.ahrq.gov/research/altstand/altstand2.htm

Clawson JJ: Emergency Medical Dispatching. *In: Principles of EMS Systems*. Rousch W.R.