

# **Provision of Palliative Care in a Mass Casualty Disaster Event**

Curtis, Mark, RN, PMHCNS-BC, ACHPN, LMT, Rick Greeno, MD

## **Introduction**

Readiness and preparedness are the conditions of an organization that is capable of responding with little or no warning to a disruptive incident or event. These conditions are based upon having a viable program in place that will enable essential functions to continue under any circumstance. After the fact planning seldom yields the best possible outcomes in an immediate emergency. Additionally, in the event of a mass casualty incident, survivors are triaged according to the perceived severity of their injuries and the probability of their survival. While the primary goal of an organized and coordinated response to a mass casualty event (MCE) should be to maximize the number of lives saved, civil society demands a secondary goal of minimizing the physical and psychological suffering of those whose lives will probably be shortened by such an event. (Matzo, M)

The purpose of this paper is to provide a framework for expanding provision of palliative care beyond its traditional role. This would include a plan to provide palliative care to those victims expected to succumb to injuries suffered during or shortly after experiencing a mass casualty disaster event.

## **History**

In 2012, a multidisciplinary task force, The Center for Disaster Mental Health (CDMH) came together at The National Center for Medical Readiness (NCRM) in Fairborn Ohio to develop, promote and apply mental health instruction, training and services in disaster situations. NCRM blends principles of search and rescue, field assessment, stabilization, field triage and transportation to the next level of care. A goal of NCRM is to fully integrate civilian and military relationships and medical and non-medical responses that occur in a disaster or other complex rescue situation. Participating on the inaugural

committee was the Innovative Care Solutions Team (ICS), providing palliative care at The Hospice of Dayton.

The Ohio Department of Health (ODH) through The Greater Dayton Area Hospital Association (GDAHA) provided the ICS team a grant to begin development of a template that could be implemented in communities across the United States for the provision of palliative care in the case of a MCE.

This task force brought together the expertise of Board Certified Palliative Care Physicians and Advanced Practice Nurses, Emergency Department Physicians, HAZMAT Trained Emergency First Responders and Building/ Safety Directors.

A beacon for the committee was Goal 5 of The Ohio Homeland Security Strategic Plan which is to ensure medical and health preparedness for a natural or man-made incident by strengthening mass prophylaxis, medical and laboratory surge, and related capabilities. Objective 5.4 stipulates that all jurisdictions will be covered by plans and procedures to effectively manage mass fatality incidents.

### **Assumptions**

- 1) The MCE is large enough or severe enough that some casualties would be identified as expectant. When enough resources are available to cover all casualties, it is unlikely except in the cases of mass trauma that anyone would be labeled as expectant.
- 2) There are enough resources to care for those for the needs of those labeled “immediate”, allowing the palliative care team to work with “expectant” patients.

### **Assessment of Need**

On December 27, 2013, The Centers for Medicare and Medicaid Services (CMS) released its Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Proposed Rule. The proposed rule would establish national emergency preparedness requirements for Medicare and Medicaid participating providers and suppliers to ensure that they adequately plan for both natural and man-made disasters, and coordinate with federal, state, tribal, regional, and local emergency preparedness systems. It would also ensure that these providers and suppliers are adequately prepared to meet the needs of patients, residents, clients and participants during disasters and emergency situations. CMS is proposing that hospice has the ability

to provide assistance to the authority having jurisdiction or the Incident Command Center or designee. (HHS Paper 12/13).

Large scale natural disasters come in many forms such as earthquakes, hurricanes, tornados, tsunami, floods, and extreme heat to name a few. Man-made/terrorist events such as those experienced on 9/11/01 once thought to be impossible are now reality.

Traditional medical paradigms in a mass casualty event focus treatment on those triaged as salvageable victims. With the advent and ascent of palliative care, there is a recognized need to consider those victims not expected to survive their injuries.

### **Should Palliative Care Resources Be Considered for Victims Expected to Die as a Result of a Mass Casualty Disaster Event?**

The World Health Organization defines Palliative Care as “an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial, and spiritual.” When a mass casualty event occurs, an organized system of triage is conducted under the guidance of the incident commander. The **SALT** (Sort, Assess, Life-Saving Intervention, Treatment/Transport) triage system was developed by the Centers for Disease Control and Prevention (CDC) to reduce triage time and better utilize resources. Victims are commonly identified using a five tiered system. This advanced triage system involves a color-coding scheme using red, yellow, green, grey, and black tags:

Red tags - (immediate) are used to label those who cannot survive without immediate treatment but who have a chance of survival.

Yellow tags - (observation or delayed) for those who require observation (and possible later re-triage). Their condition is stable for the moment and, they are not in immediate danger of death. These victims will still need hospital care and would be treated immediately under normal circumstances.

Green tags - (wait or minimal) are reserved for the "walking wounded" who will need medical care at some point, after more critical injuries have been treated.

Grey tags - (expectant) are used for those whose injuries are so extensive that they will not be able to survive given the care required and available resources.

Black tags - are used for the deceased.

Understandably, in a mass casualty disaster, the goal of healthcare is to save as many lives as possible. This may be a challenge with the probability of scarce resources to allocate amongst the victims.

### **Ethical Considerations**

Ethical principles may compete to support or challenge utilization of palliative care for those victims deemed grey (expectant).

Utilitarianism is the ethical theory that the rightness or wrongness of an action is determined by its usefulness in bringing about the most happiness of all those affected by it. Utilitarianism is a form of consequentialism, which advocates that those actions are right which bring about the most good overall.

Distributive justice refers to a concept of an equitable balance of benefits and burdens with particular attention to situations involving the allocation of resources. A component of the principle of justice is the principle of equality. The principle of equality requires that all benefits and burdens be distributed equally. The advantage to this conception of justice is that everyone is entitled to an equal share of resources.

Although ethical principles may be and should be considered when faced with a catastrophic event, the purpose of this paper is not to debate ethical positions or to suggest the diversion of life saving resources away from those who have a greater chance of survival. This paper is to advocate for providing quality of life and dignity to those unfortunate individuals whose likelihood of recovery from their injuries are unlikely.

### **Programming for a Palliative Care Community Disaster Support Team**

Establishing a Palliative Care Community Support Team needs to address 5 primary questions.

**Why:** While the primary goal of an organized and coordinated response to a mass casualty event should be to maximize the number of lives saved, palliative care respects the humanity of those who will die soon to assure their comfort while supporting their loved ones. (Biosecurity and Bioterrorism: Biodefence Strategy, Practice and Science, 7-2, 2009). This may include victims directly exposed to the event, already existing palliative care patients and vulnerable

patients prior to the disaster whose situation will be worsened due to limited resources associated with the event.

A review of the available literature finds that many if not most mass casualty disaster plans do not include provision of palliative care. This lack of planning can leave a segment of the injured community left to die a painful and undignified death. In addition to the dying victims, family may suffer as a consequence of feeling helpless as they watch their loved one die without basic bio-psycho-social-spiritual needs being met. Lack of palliative care planning can have long lasting consequences to individuals and a community as they try to recover from the MCE.

The ICS Palliative Care Team procured the assistance, support and input of an EMS/Disaster Management expert to assist in the development of the Palliative Care Mass Casualty Event programming. Challenges of taking on this endeavor were quickly recognized as an understanding of the standard model of triage and care came into focus. The prevailing MCE caregiving model was focused on those salvageable victims with minimal planning for those expectant individuals. Communication and compromise were seen as necessary and valuable elements for success of this program.

**What:** A collaborative program to integrate into disaster plans with community health care partners, maintain services in a sustained event and to enhance surge capacity to care for an influx of patients. (Palliative Care in a Disaster, Sally Phillips, Director of Public Health Emergency Preparedness Program). As there are a limited number of palliative care providers within a given community, best utilization of resources must be considered. The palliative care program must provide specialty service in coordination within the established community disaster plan.

Lamba, et al identifies the possibility where there may not be enough life supporting resources to treat all patients in need. Disaster plans should therefore include both algorithms for how to allocate scarce resources and plans for providing palliative care for patients who cannot be saved.

The goal of palliative care is to relieve suffering. Although the common focus of suffering is physiological pain, suffering can also manifest in emotional, psychological, and spiritual ways. In a MCE, the palliative care team can assist the casualty victim to cope emotionally, understand psychologically and come to term spiritually with the outcome of the disaster and its effect on their life. The palliative care team can also be a resource to the family of the injured person to provide multidimensional support for their multilayered suffering.

**Who:** Delivery of palliative care services will be provided by a Board Certified Palliative Care Physician lead Interdisciplinary Team with special training in mass casualty disaster events. The team would consist of Physicians, Advanced Practice Nurses, Nurses, Social Workers, and Chaplains.

Certified palliative care practitioners trained in management of end of life bio-psycho-social-emotional-spiritual issues are a strength of any disaster response team. They are experts at end of life pain and symptom management requiring conventional and non-conventional pharmacological options.

Prior to a MCE, collaboration with the disaster management personnel at each potential annexed site should take place to ensure knowledge of the facility, leadership roles and decision making hierarchy and protocols. Additionally, it is essential to have a plan in place to address effective utilization of community volunteers that may show up willing to assist with casualties.

**Where:** Due to limited resources, delivery of palliative care would be most effectively delivered at an annexed site designated in collaboration with the local Domestic Preparedness Coalition. Multiple site designations could be available for utilization based upon safe delivery of care, proximity to event, needs of collaborating organizations, and availability of trained palliative care personnel. Sites may include an annexed area of a hospital, extended care facility, school gymnasium or cafeteria, or community building with a large enough area to provide palliative care to those expectant victims. Although provision of palliative care at the site of a MCE may be considered, our team found that this was not likely the best use of palliative resources. First, this may limit access of the palliative care team to a small number of victims especially when casualties may be transported from multiple disaster areas to an annexed site. Secondly, the site of a MCE may actually place the palliative care providers at risk. Thirdly, as all health care providers at a disaster scene fall under the direction of the Incident Commander, the palliative care team may be diverted to treat other than expectant victims. On site care may also limit the practitioners' ability to coordinate service to the families of patients.

**When:** Large scale natural disasters come in many forms, earthquakes, hurricanes, tornados, tsunamis, floods, and extreme heat to name a few. Man-made/terrorist events such as those experienced on 9/11/01 once thought to be impossible are now reality.

The definition of disaster adopted by the United Nations and the World Health Organization describes disaster as: "A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources." Whenever a natural or manmade disaster occurs that overwhelms the resources of one or more institutions

a coordinated palliative care plan should be implemented to compliment the already existing community mass casualty disaster plans.

## **Guiding Principles**

When considering development of a palliative care disaster support team for a community it is important to first be sure that your own institution/facility is in order and has an internal disaster plan for providing support to those already under your care. Once this has been established, then your team may be available for community support.

Research what your community may already have established in the area of an MCE.

Develop collaborative relationships with diverse community organizations such as hospitals, nursing homes, fire and police departments, red cross, local universities, and if your community has a Metropolitan Medical Response System or Disaster Preparedness Coalition.

Maintain lines of communication with critical contacts.

Obtain training for the palliative care disaster support team.

Obtain Hospital Incident Command System (HICS) training.

Participate in community disaster response drills.

Understand the local incident command system.

Know the triage system used by your community

## **Summary**

Provision of palliative care in a mass casualty event has long been ignored by established protocols existing in triage and treatment of disaster victims. The Innovative Care Solutions Team at Hospice of Dayton is engaged in developing a multidisciplinary approach to establish a disaster palliative care program complimenting and coordinating with existing community disaster preparedness planning.

Our hope is that communities across the country can jumpstart their own palliative care programs to include the provision of care in a mass casualty event.

“When the needs of the many outweigh the needs of the one, what happens to the one?”  
(Phillips, S)

## **References**

- 1) Association for Healthcare Quality and Research, Chapter VII, Palliative Care, November 1, 2010.
- 2) SALT mass casualty triage: concept endorsed by the American College of Emergency Physicians, American College of Surgeons Committee on Trauma, American Trauma Society, National Association of EMS Physicians, National Disaster Life Support Education Consortium, and State and Territorial Injury Prevention Directors Association. Disaster Med Public Health Prep. 2008 Dec;2(4):245-6.
- 3) Lamba, Sangeeta, Schmidt, Terri, Garrett Chan, Knox, Todd, Grudzen, Corita, Weissman, David, Quest, Tammie, Integrating Palliative Care in the Out-Of-Hospital Setting: Four Things to Jump-Start an EMS Palliative Care Initiative. Prehospital Emergency Care, July/September 2013.
- 4) Matzo, Marianne, Palliative Care Considerations In Mass Casualty Events, Biosecurity and Bioterrorism: Biodefence Strategy, Practice and Science, 7-2, 2009.
- 5) Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers, Hart Health Strategies, [www.hhs.com](http://www.hhs.com), 2013.
- 6) Roberts, Marc, Hodge, James, Gabriel, Edward, Hick, John, Cantrell, Stephen, Wilkinson, Anne, Matzo, Marianne, Mass Medical Care with Scarce Resources: A Community Planning Guide, AHRQ Publication No. 07-0001.
- 7) Phillips, Sally, Palliative Care in a Disaster, Recommendations of the State Expert Panel on how to care for the dying in a mass casualty incident, October 26, 2009.
- 8) Ciottone, Gregory, et al, Disaster Medicine, Mosby, Inc., 2006, Philadelphia PA, 19103.

