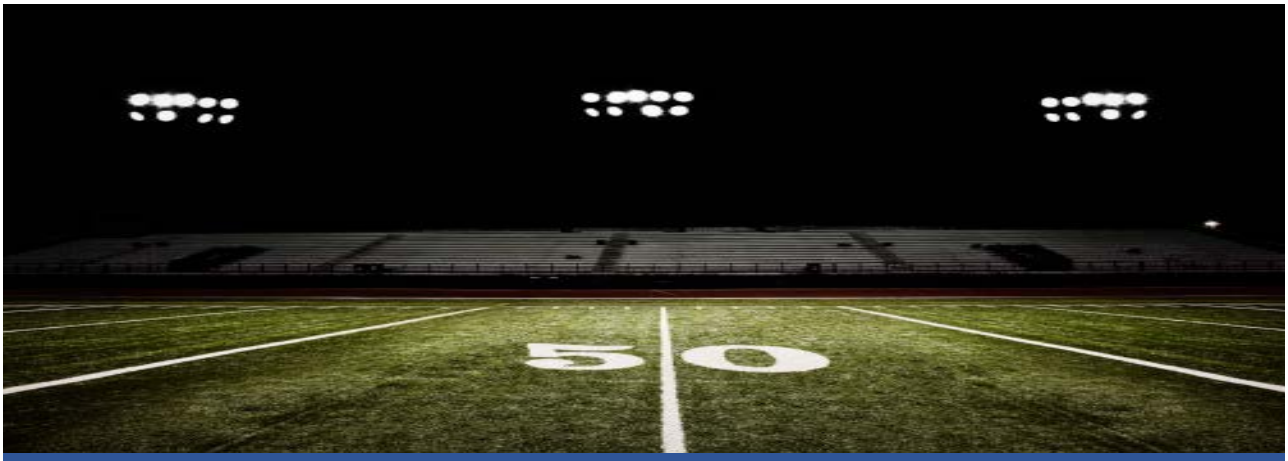


Hospital Area Command

After Action Report












After Action Report
Hospital Area Command Exercises
May 2022

In January of 2022, the Clark County Office of Emergency Management (CCOEM) determined the need to test the concept of hospital area command (HAC). HAC was developed in the wake of the Route 91 Harvest Festival mass shooting that took place on October 1, 2017, in Las Vegas, Nevada.

On that tragic evening, a Henderson Fire Department (HFD) engine company and rescue unit were at Sunrise Hospital when a large wave of critically injured patients arrived at the ER entrance, most by privately owned vehicles (POV). These fire crews immediately assisted the ER staff and became a force multiplier by assisting with triage, patient care to including advanced life support (ALS) interventions. There is no doubt that patient outcomes were greatly improved because of their actions. This event quickly highlighted the benefits of having fire department (FD) units supporting local ERs during a time of patient surge. Thus, the HAC concept was born.

CCOEM identified a funding source for exercising the HAC policy, however they lacked the available staff to do so. The CCOEM planning team consisted of two retired CCFD executive staff members (Greg Cassell and Jon Wiercinski) and Karen Donnahie (RN) from Southern Nevada Health District (SNHD). The planning team successfully collaborated in designing, coordinating, and delivering this training opportunity to seventeen (17) area hospitals to include the County hospital, a federal hospital, and all privately-operated full-sized hospitals in Clark County. The training began on May 9, 2022 and concluded on May 26, 2022.

This after action will provide information taken from the exercises in the following areas:

I. Successes

The concept of hospital area command is relatively simple. Training material and the drill was intended to maintain this level of simplicity by focusing on the interaction of participants and limiting the complexity of clinical interventions and external threat injects that were initially proposed.

At the time of the drills, many of the participating hospitals were operating at or near capacity. Each drill took approximately one hour to complete. Consisting of a 30-minute hands-on-exercise followed by a 20–30 minute hotwash. This brief intrusion into the ER staff's day seemed well received by all.

Surprisingly, many of the hospital ER staff members were unfamiliar with the capabilities of fire department personnel and equipment. During these drills, the level of equipment and treatment protocols for paramedics were brought to the attention of ER staff members. The FD's ability to intubate, perform chest decompression, and manage field triage at a mass casualty incidents (MCI) were three of the biggest takeaways for ER staff.

Fire department company officers are capable of requesting a broad number of resources. During most drills, company officers made hospital staff aware of these resources that were available to them if needed. In one memorable interaction, a Las Vegas Fire and Rescue (LVFR) captain asked the charge nurse at an early stage in the drill "What resources will we need in 30 min?" It was clear by hospital feedback that this perspective was helpful, and that the fire department's chain of communication was helpful in securing resources to fulfill hospital needs.

In the SNFO (Southern Nevada Fire Operations) Hospital Area Command Policy, FD personnel fill a supportive roll, deferring to the hospital staff for direction. Fire crews were reminded that hospitals retain primacy in decision making prior to the drills. This reminder clearly communicated the chain of command to the FD crews and limited confusion.

Hospital area command drills that took place in Mesquite and Boulder City displayed strong relationships between fire department personnel and the clinical staff of their respective hospitals. These facilities were further assisted by hospital administrators with clinical experience that assisted in the early moments of patient surge.

The success of the planning team was rooted in their well-established relationships, operational credibility, and ability to communicate clearly to all who were involved in the drills. This included assisting in policy approval, coordination with numerous agencies, and successful training outcomes. The planning team relied heavily on the support and participation of CCOEM staff familiar with full scale exercise development, documentation, and execution.

II. Challenges

It is imperative that the fire captain working as the division supervisor at a hospital find the charge nurse as quickly as they can. When this is done, both parties should stay together and function as a team providing direction to those working on patients.

Charge nurses must resist the temptation to treat patients and focus their attention to directing others involved in patient care and movement. In addition to directing personnel, their knowledge of requesting supplies, equipment, and additional hospital staff needed to assist in the treatment and movement of patients must be leveraged. Once charge nurses were teamed up with fire captains and stepped back from task level work, they quickly saw the benefit of doing so.

Given the complexity of the communication center software and the infrequency of large mass casualty incidents, the dispatchers struggled to initiate hospital area command (See HAC policy recommendations below).

In the early phases of planning this exercise, not all local hospitals were interested in participating. Planning team member Karen Donnahie, had the contacts, relationships, and knowledge of hospital needs to secure hospital participation. Heritage relationships are essential in assuring hospital participation.

III. Hospital Considerations

While hospitals are considered safe areas, hospital staff must consider elements of scene safety in surge responses. Ensuring a safe response to an MCI patient surge requires awareness of the possibility of encountering hostility while responding to arriving patients. Staff safety is a vital element to surge response. Hospital security, with the collaboration of local law enforcement, can create a simple and memorable process to establish, secure and manage a receiving area for patient screening and triage.

Nurses and physicians are comfortable triaging patients using the standard Emergency Severity Index (ESI) methodology of triage, but are much less familiar with the practice of mass casualty triage. It is often difficult for professional caregivers to refrain from providing "all the things" for each patient encountered, rather than focusing on doing the most good for the most people, especially in the primary stages of response.

Hospital staff would benefit greatly from regular review and participation in field triage systems used by first responders (i.e. SALT / START). Practicing these types of field triage programs would enable hospital staff to easily transition from ESI into MCI triage. Understanding and using MCI field triage allows the hospital to be consistent with prehospital MCI triage processes. Another benefit of using the START or SALT triage system can assist in moving patients. Many of the walking wounded will be able to move to a designated area to await treatment without using a gurney or wheelchair. Some may even be able to help transport a friend/family member who needs a little mobility assistance, allowing clinical staff to care for more severely injured patients.

A patient surge will require options for moving patients safely. Gurneys, wheelchairs and litters may be used in the triage areas, but are often located throughout the hospital. Having a facility-wide plan to gather these pieces of equipment when an MCI code is paged will enable the hospital to quickly provide these items.

The sheer number of patients encountered with a surge creates difficulty in keeping track of patient numbers, triage categories and current locations of patients who have arrived. The utilization of non-clinical individuals to act as scribes for the charge nurse and/or the triage nurse is recommended.

Communication amongst emergency department response teams can be challenging. Two-way radios which can be used outside and inside the facility, may improve communication.

IV. HAC Policy Recommendations

Recommendations for SNFO HAC SOP (SNFO-14)
Having completed the series of HAC drills, we have identified a few areas of opportunity for improvement of the policy. The areas we have identified are located in the following sections:

- Policy
- Definitions
- Procedures

Policy
Each of the drills identified a hurdle in the policy related dispatchers being able to consistently activate HAC. In reality, the infrequency of MCIs combined with the dispatcher's workload, current configuration of their respective CADs and the anticipated crush of phone calls that will befall a communications center during an MCI make this trigger point less reliable. With that said, we recommend the following changes to the Policy section.

- Delete all current language and add language similar to the following:
  - In the event of an MCI Level 3 or larger, one of the responding battalion chiefs will request that dispatch contacts another battalion chief (who is preferably in quarters and far away from the incident site) to set up HAC.
  - Once established, the battalion chief serving as the HAC IC will request the response of an engine/truck company to the closest two hospitals and closest trauma center in relation to the location of the original MCI. HAC will support the needs of those company officers working at these locations.

Definitions

- Delete current language and add language similar to the following:
  - Hospital Area Command (HAC) is an Incident Command System (ICS) assignment that provides for a chief officer to oversee and support the resources used to assist a hospital(s) experiencing a patient surge during a Mass Casualty Incident (MCI). HAC will be utilized for all Level 3 and higher MCIs.
  - Emergency Medical Treatment & Labor Act (EMTALA) is a federal law requiring hospitals to provide a medical screening and stabilization to all patients and a physician-to-physician phone call prior to transporting a patient from one hospital to another.

Procedures:

- Leave the first sentence, delete the remainder of this section.
- Add language similar to the following:
  - Triggers for activating HAC:
    - Confirmation of a Level 3 MCI or higher.
    - Request by a hospital.
    - Request of any fire department unit.

- Dispatchers shall assign a tactical channel for use by the HAC.
- It is recommended that the HAC IC (Incident Commander) has a resource added to assist them as an aide or deputy IC if they don't already have one.

V. Artificialities

During this exercise, the following artificialities existed:

- Only one hospital was exercised at a time; the other hospitals involved were notional. This may not be representative of all radio traffic and/or resource requests that a Battalion Chief (BC) or dispatcher could expect to receive.

- Fire crews and hospital personnel responded to a sterile environment free from emotion or eminent danger. Signs and symptoms were only presented by patient cards placed on mannikins. In a real HMCI we can expect that the sights, sounds, smells and overall chaos would impact response.

- There may be communication challenges present due to speech impairment, language barriers, and patients with altered levels of consciousness.

- Patients would be significantly more difficult to move than lightweight mannequins and would take exponentially longer to sift and sort.

- During a real MCI, hospitals and responders should expect that family members will show up and demand status reports on their missing or injured loved ones.

- Law enforcement would have a much larger role at the task, tactical, and strategic level of a HMCI.

Other artificialities included extra staffing on exercise days, just-in-time training, pre-notification, prompting a review hospital MCI support policies and procedures all can cause an overestimated level of preparedness.

VI. Feedback/Survey Results

Feedback from all drill participants was collected verbally following each training event in the form of a facilitated hotwash, and electronically using an anonymous survey. 94% (223/ 239) of participants in the electronic survey agreed or strongly agreed that fire department support would improve emergency department or trauma center operations during acute patient surge related to a mass casualty incident. Feedback and survey results are including as an attachment in ***Section VIII. Attachments*** of this document.

VII. Acronyms

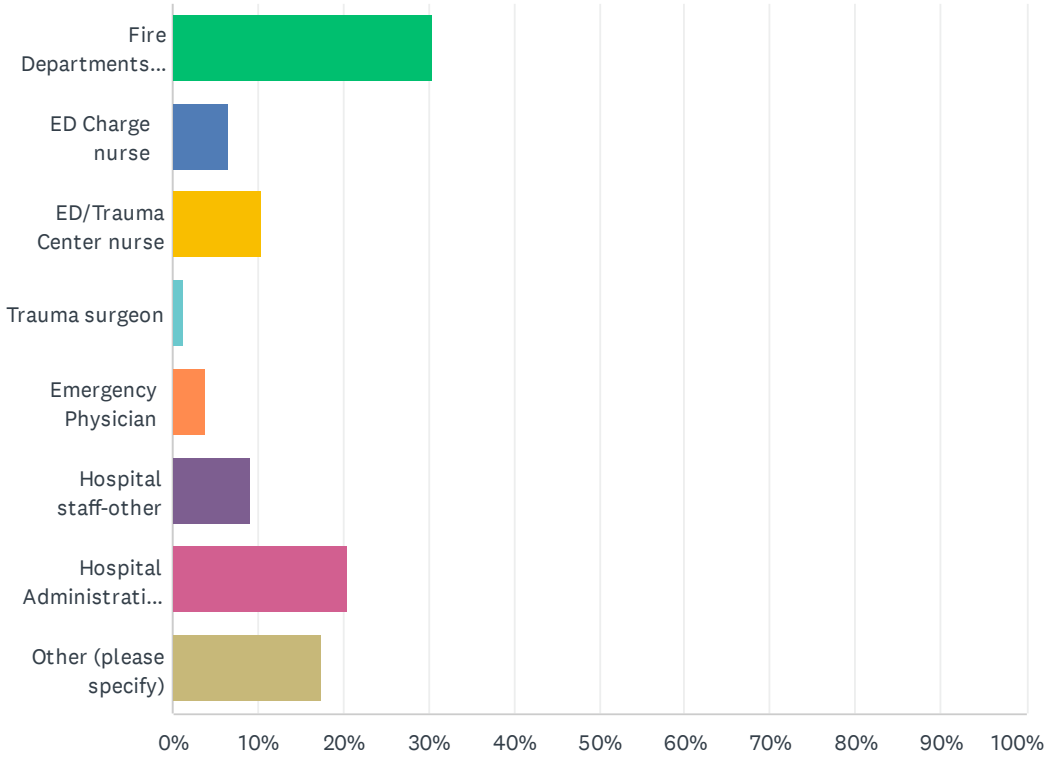
ALS	Advanced life support
BC	Battalion Chief
CAD	Computer aided dispatch
CCOEM	Clark County Office of Emergency Management
CCFD	Clark County Fire Department
ER	Emergency room
ESI	Emergency Severity index
FD	Fire Department
HAC	Hospital Area Command
HFD	Henderson Fire Department
HMCI	Hostile Mass Casualty Incident
IC	Incident Commander
ICS	Incident Command System
LVFR	Las Vegas Fire and Rescue
MCI	Mass Casualty Incident
RN	Registered Nurse
SNFO	Southern Nevada Fire Operations
SNHD	Southern Nevada Health District
SALT	Sort, Assess, Lifesaving interventions, Treatment/transportation
START	Simple triage and Rapid Treat
SOP	Standard Operational Procedure

VIII. Attachments

(See next page for Feedback/Survey Results)

Q1 What is your position? (Please select one below.)

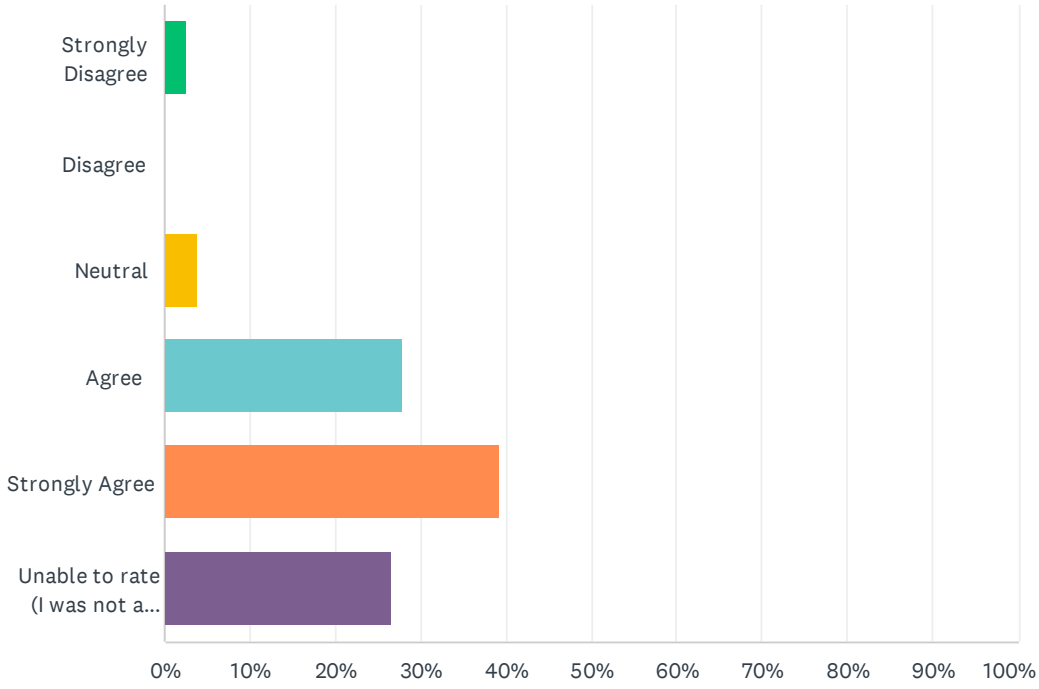
Answered: 239 Skipped: 0



ANSWER CHOICES	RESPONSES	
Fire Departments personnel	30.54%	73
ED Charge nurse	6.69%	16
ED/Trauma Center nurse	10.46%	25
Trauma surgeon	1.26%	3
Emergency Physician	3.77%	9
Hospital staff-other	9.21%	22
Hospital Administration/Management	20.50%	49
Other (please specify)	17.57%	42
TOTAL		239

Q2 Following the video training, the intention of the SNFO Hospital Area Command (Hospital Support) policy was clear.

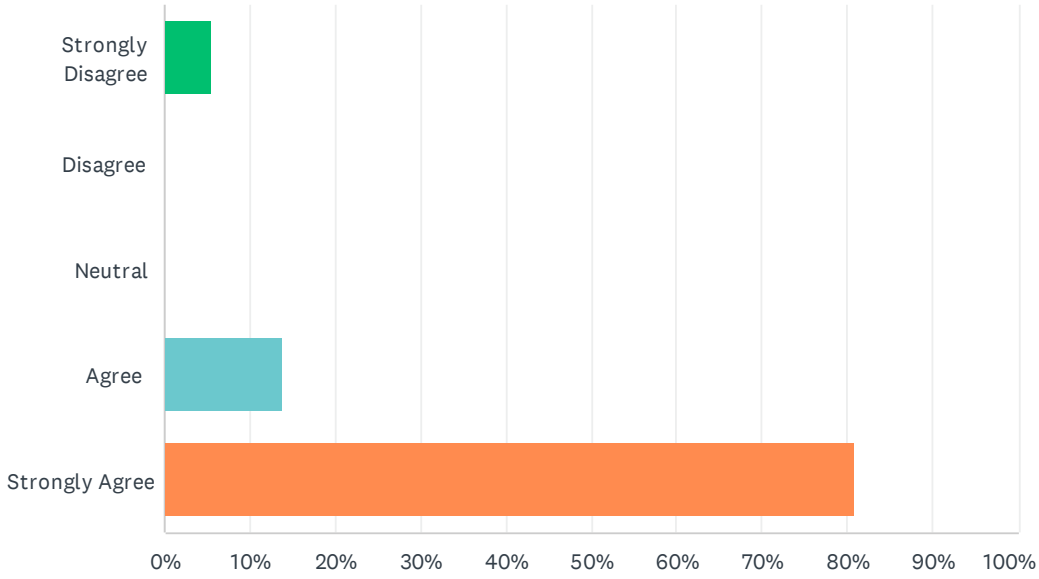
Answered: 237 Skipped: 2



ANSWER CHOICES	RESPONSES	
Strongly Disagree	2.53%	6
Disagree	0.00%	0
Neutral	3.80%	9
Agree	27.85%	66
Strongly Agree	39.24%	93
Unable to rate (I was not able to watch the video prior to the drill)	26.58%	63
TOTAL		237

Q3 The use of Fire Department resources to support hospitals during acute patient surge related to Mass Casualty Incidents is a valid concept.

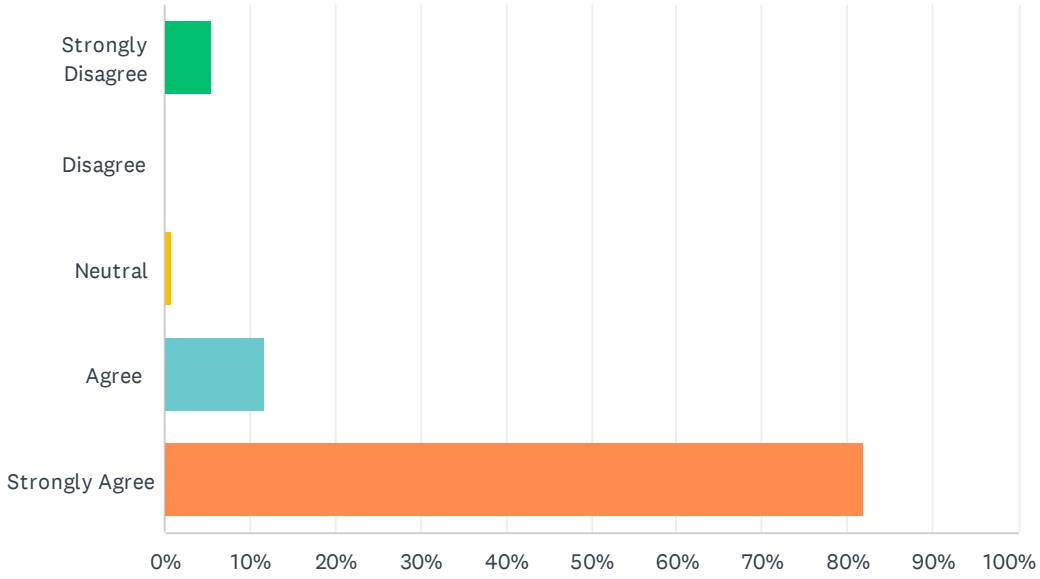
Answered: 239 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly Disagree	5.44%	13
Disagree	0.00%	0
Neutral	0.00%	0
Agree	13.81%	33
Strongly Agree	80.75%	193
TOTAL		239

Q4 Fire department support would improve emergency department or trauma center operations during acute patient surge related to a Mass Casualty Incident (MCI).

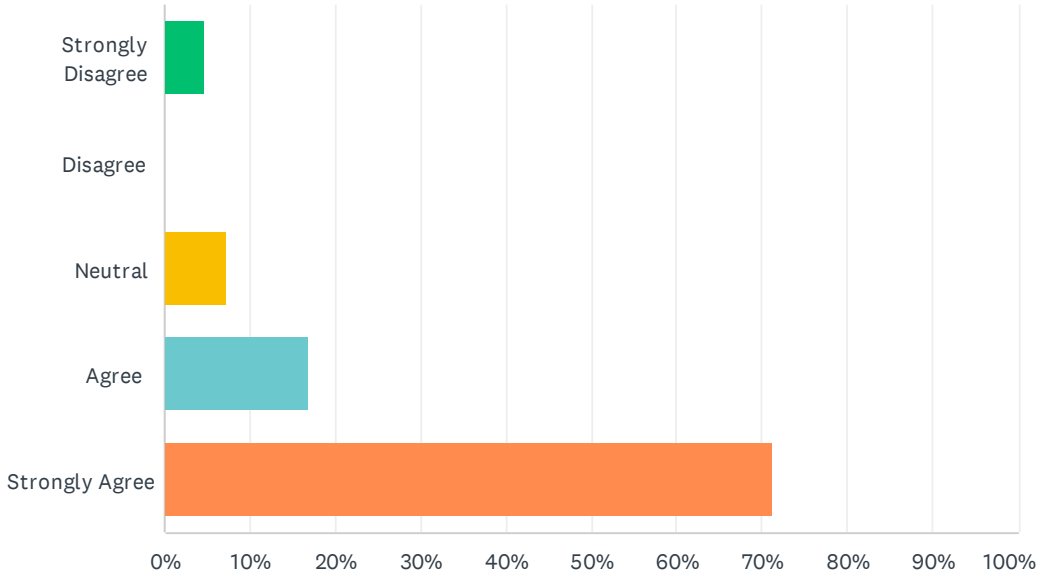
Answered: 238 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly Disagree	5.46%	13
Disagree	0.00%	0
Neutral	0.84%	2
Agree	11.76%	28
Strongly Agree	81.93%	195
TOTAL		238

Q5 If supported by my hospital's leadership, and after following my expected hospital chain of command, I would be comfortable requesting Fire Department hospital support if the emergency department or trauma center experienced patient surge related to a Mass Casualty Incident.

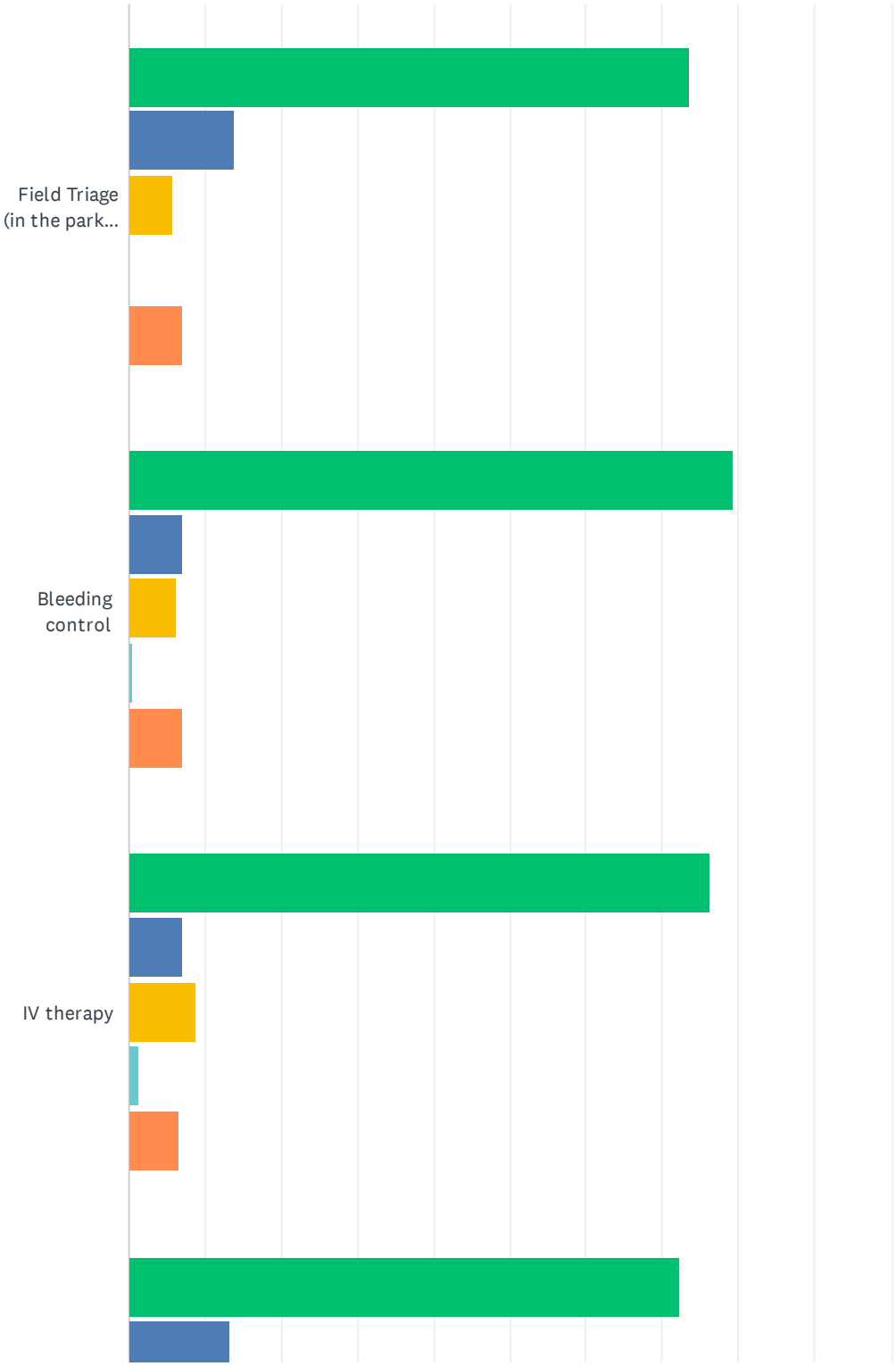
Answered: 233 Skipped: 6

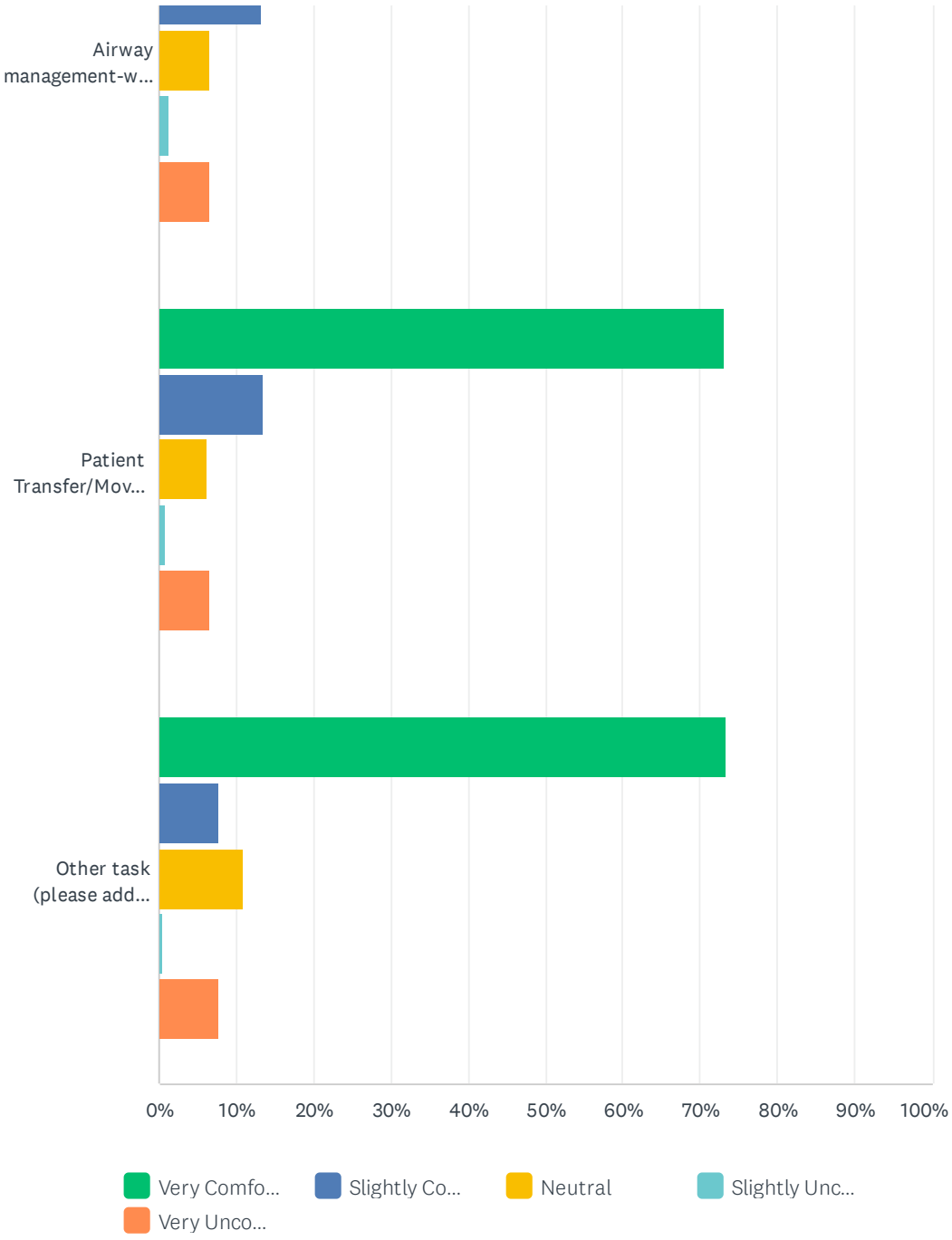


ANSWER CHOICES	RESPONSES	
Strongly Disagree	4.72%	11
Disagree	0.00%	0
Neutral	7.30%	17
Agree	16.74%	39
Strongly Agree	71.24%	166
TOTAL		233

Q6 If your emergency department or trauma center experienced patient surge and fire department personnel were onsite to support your facility, please indicate how comfortable you would feel with fire department personnel conducting/performing the following tasks:

Answered: 230 Skipped: 9




Airway management-w...
Patient Transfer/Mov...
Other task (please add...
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Very Comfo...
Slightly Co...
Neutral
Slightly Unc...
Very Unco...

	VERY COMFORTABLE	SLIGHTLY COMFORTABLE	NEUTRAL	SLIGHTLY UNCOMFORTABLE	VERY UNCOMFORTABLE	TOTAL	W A
Field Triage (in the parking lot)	73.48% 169	13.91% 32	5.65% 13	0.00% 0	6.96% 16	230	
Bleeding control	79.39% 181	7.02% 16	6.14% 14	0.44% 1	7.02% 16	228	
IV therapy	76.42% 175	6.99% 16	8.73% 20	1.31% 3	6.55% 15	229	
Airway management-within scope of protocols	72.37% 165	13.16% 30	6.58% 15	1.32% 3	6.58% 15	228	
Patient Transfer/Movement (within the hospital property)	73.04% 168	13.48% 31	6.09% 14	0.87% 2	6.52% 15	230	
Other task (please add task to comments below)	73.33% 143	7.69% 15	10.77% 21	0.51% 1	7.69% 15	195	

Q7 We are interested in your suggestions/recommendations. Please provide suggestions to improve the SNFO Hospital Area Command (Hospital Support) policy, training or drill. Thank you!

Answered: 59 Skipped: 180