Chapter 2
Combat Triage and Mass Casualty Management

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BLUF Box (Bottom Line Up Front)

1. The Five R's: RESOURCES, REHEARSE, RESPOND, ROUTE, RESET.
2. SECURITY is the foundation of safe and effective care:
   BEST medicine on battlefield is FIRE SUPERIORITY!
   Ensure effective enemy action is ended prior to rushing to treat.
3. Plan BEFORE the casualties arrive; rehearse the Plan to build "muscle memory".
4. Rapidly sort patients with ABCDE sweeps: 2A's – Arterial Hemorrhage + Airway, then B + C, then D + E (15 s).
5. Rapidly reassess every patient for changes or mis-triage.
6. The triage officer (TO) should be one of your most experienced and organized personnel.
7. Triage = provide greatest good for greatest number, NOT "sickest first".
8. Use every resource (blood, x-ray, evacuation, personnel) appropriately.
9. Patient admin personnel and record keeping are essential to MASCAL response.
10. Remember heart and compassion – for victims and for team.

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"In any emergency setting, confusion is a function of the cube of the number of people involved."

Clement A. Hiebert

Introduction

Although much of this book focuses on preparing for combat trauma care at the individual provider level, the most critical training for a UNIT to prepare to handle combat casualties is Triage and Mass Casualty Management. This chapter will share triage and mass casualty expedients from three combat perspectives representing different echelons of care. Every trauma patient triggers a triage or sorting to align available resources with needs. But when those needs surpass apparent resources, we declare a MASCAL or mass casualty and launch a series of rehearsed strategies to achieve the greatest benefit for the most patients. Intensity, number of casualties, and environment all contribute to this overload calculation: a single complex injury patient can eliminate a unit's ability to deliver additional casualty care, and two immediate surgical patients will max out many Level 2 facilities. Medical leaders can hone a unit's trauma-ready posture to expand its ability, as "*chance favors the prepared team*." This chapter reviews the "5-R's" to prepare a team for successful combat trauma response: Resources, Rehearsal, Response, Route, and Reset.

Resources

Security

While security may not seem to be a direct medical responsibility, it is always your concern, since the current asymmetric battlefield entails risk at all echelons of care, from aid station to theater hospital. Ongoing enemy action at the scene will force limited "care under fire" response. Fire superiority can be the "best medicine" until the site is secure, but medical personnel pull triggers only if security elements cannot meet the demands. Avoidable injuries to the medical team can doom its mission. Security forces should quickly assess for catastrophic secondary attacks and establish a safe perimeter for the treatment facility or triage site. If chemical contamination is a risk, a sweep of incoming casualties may be required, but available chemical detectors will slow your triage and treatment process.

Your MASCAL plan should incorporate a thorough plan for providing safety and security to the patients and facility staff. The priorities should be on securing the area, controlling vehicular access, controlling pedestrian access, and assisting with the management of enemy or suspected enemy casualties. Although hospital units have traditionally been off-limits during conventional warfare, they are seen as a high-value target by enemy forces in current combat operations. All unknown vehicles or persons must be verified and searched prior to allowing them access to the facility. Enemy casualties should be searched and secured, even if it does delay care. Controlling access then becomes the most important security function, as people

will naturally gravitate to the hospital area when there is a MASCAL situation. Although most are well-intentioned, if you allow access to bystanders and non-essential personnel you will only make an already chaotic situation worse.

Context

The current military casualty triage and evacuation system uses a model of echelons of care with progressively increasing capabilities; from point of injury (Level 1) to Level 5 hospitals in the U.S. (see Table 2.1). Your unit's role in the casualty care continuum in both military and civil contexts will shape its trauma response, whether it is Level 1 unit point of injury care on the forward battlefield, Level 2 life-saving damage control surgery, or Level 3 vascular reconstruction. While not ironclad, Level 1 units are often first responders to civil and military events, with "on-scene care" and care under fire. Level 2 units frequently receive ground and air transported casualties, and Level 3 facilities are geared to receive air-evacuated casualties as "fresh trauma" from point of injury and Level 1 units and as "used trauma" from Level 2 units which have already performed initial life-saving surgical management. Local host nation hospitals may be able to receive and manage wounded national patients in order to augment a unit's MASCAL response.

Trained and Ready Personnel

Medical personnel will benefit from trauma care experience prior to deployment. Advanced Trauma Life Support (ATLS) training is a must, but should be supplemented with additional combat and service specific courses. Since units are often built with personnel who have minimal time together before deployment, common training can accelerate cohesive unit response in theater. Be sure to survey personnel in your unit and on the Base to find capable people "hidden" in other units or in command and staff billets. You can often identify individuals with medical skills beyond their duty titles that can be helpful in MASCAL scenarios. Since many units receive and treat more civilian than military casualties, specialty skill sets such as pediatrics, obstetrics, or burn care can be invaluable.

Culture

Competent cultural assistance is vital in international trauma response. Medically-seasoned interpreters are essential team members at the bedside throughout the triage and treatment process. They play a huge role in shaping culturally sensitive care. Unit members who learn basic local language greetings and health questions can enhance trust and effectiveness in the care of wounded nationals. A capable bicultural

Table 2.1 Military Echelons of care

Echelon of care	Example	Surgical capability	Capabilities	Comment
Level 1	Battalion Aid Station, Shock Trauma Platoon	None	"Aid bag", limited supplies, maybe ultrasound	Medics and PA or Primary Care doc; no hold capability
Level 2	Forward Surgical Team (FST), Air Force Field Surgical Team, Navy Forward Resuscitative Surgical System (FRSS)	Limited	Damage control surgery, basic lab, basic x-ray and ultrasound, oxygen, simple blood FRSS has surgeon, orthopedics, anesthesia, ER, FP or GMO, psych, dental	Patient hold beds, MEDEVAC drops patients here; may be mobile – may divide to send bounding element ahead
Level 3	Combat Support Hospital, Theater Hospital, Hospital Ship	Yes, general and orthopedic surgery, often subspecialties	Multiple specialists, advanced lab and blood product support, advanced radiology and CT, physical therapy	Damage control surgery, more definitive management; stabilization and evacuation portal to Level 4
Level 4	Regional Medical Center (Landstuhl, Germany)	Extensive, excellent subspecialty support	Major medical center capabilities	More definitive surgical intervention; burns may bypass directly to Brooke Burn Center
Level 5	CONUS National Medical Referral Center (Walter Reed, Bethesda, Balboa, Brooke)	Full tertiary care	Full rehabilitation and specialty intervention	Performs most delayed and "reconstructive" care

or host nation medical officer or authority can "sweep" the injured to identify family groupings or key individuals such as high ranking government officials or celebrities. The same liaison can help disposition injured host nationals to national medical providers and facilities if medical personnel have cultivated relationships with them. In Afghanistan, tea with the local hospital director resulted in over 20 rapid patient transfers to his facility during a busy summer month, allowing quicker facility recovery and better support of Coalition operations. In Baghdad, we hosted shared CME for local physicians to build trust in sessions orchestrated by a contracted Iraqi-born civil medical liaison physician. US Marine Forces operating in Al Anbar routinely augmented medical missions in support of local Iraqi physicians, and provided resources, medical supplies, and logistics that their healthcare infrastructure lacked, building trust bonds.

Supply and Transport

Casualty care can consume large volumes of supplies, and resupply will be a major determinant of unit casualty response. Many units develop lists of trauma response supplies and cache them in strategic locations. Be sure to note expiration dates prominently if IV fluids or meds are part of these contingency stores. Define transportation and evacuation resources and routes. Transport options are exquisitely sensitive to tactical situation, terrain, and weather. A dust storm can eliminate rotary wing evacuation of casualties. Stabilization and rapid transport to a higher level of care is the main mission for Level 1 and nonsurgical Level 2 units without patient hold capability or resources to "sit on" casualties. If you depend on rotary wing evacuation, prepare ground evacuation or patient hold contingency plans in case aircraft are grounded.

Rehearsal

Plan

Analyze and plan for the mission, engaging all stakeholders to choreograph a shared response that remains flexible enough to match unique events. (See Fig. 2.1 for simple plan template.) The MASCAL mnemonic (minimize chaos, assess, safety, communication, alert, and lost) is a great starting point and guide (Fig. 2.2). Key considerations include security and protection needs, command and control, communications means and frequencies, casualty collection points (CCP's), medical resupply, litters and straps, and personal protective equipment posture. Landing zones need to be defined with marking devices at the ready, and lights are needed for outdoor night operations. Safe transportation routes into and

MASS CASUALTY PLAN FOR DATE

Unit
Location
Date

References:

a. MAP 8
b. Operations Order

Time Zone Used Throughout the Order:

TASK ORGANIZATION: See base order of organization of units.

1. SITUATION: Base units prepared to conduct coordinated emergency medical response operations during tactical and non-tactical disasters.

A. Enemy Forces. (threat assessment)

2. MISSION: On order, execute MASCAL operations for rapid treatment and evacuation of casualties.

3. EXECUTION:

a. All Medical Units – define mission, evacuation, goals
b. MASCAL – define, identify declaration authority

Define execution by 4 Phases of MASCAL Operation:

Phase 1 - Preparatory phase:
Prepare and train
Define communications

Phase 2 - Immediate response and incident notification:
First responder care
Notify base security element
Dispatch incident commander to scene
Notify medical units via communications net
Dispatch elements for site security, ordnance clearance, crowd and traffic control

Phase 3 – Coordinate medical response:
Provide care at MASCAL site: all casualties triaged, life-saving treatment initiated.
Initiate evacuation of urgent and urgent surgical

Phase 4 – Reception, staging and evacuation:
Evacuate and cross-level casualties
Document care and accurate reports to ensure 100% accountability of casualties

4. SERVICE SUPPORT: Define units' resupply procedures during and after the event

5. COMMAND AND SIGNAL

a. Command - define who is in charge
b. Signal – define frequencies, numbers, means of communication

Signed: Commander

Annexes:

Response maps
Ground evacuation (NO FLY) Plan if air evacuation cannot be employed
Notification Matrix (radio, phone tree with frequencies, numbers)
Responsibility Matrix by unit (geographic area of responsibility or specific role))
Patient Care Matrix for rules of engagement for host nation casualties, combatants

Fig. 2.1 Template for MASCAL plan

out of the area must be clearly defined, with special attention not to endanger casualties and treatment areas on the ground. Casualties will need to be disarmed, and suspected enemy combatants will need to be appropriately monitored. Many sites modify the Incident Command structure employed in emergency response at many U.S. hospitals, where an overall incident commander directs coordinators with

Fig. 2.2 MASCAL mnemonic illustrating key points for mass casualty scenario management

specific responsibilities such as triage, treatment teams, security, logistics, public affairs, manpower pool, security, transportation and evacuation.

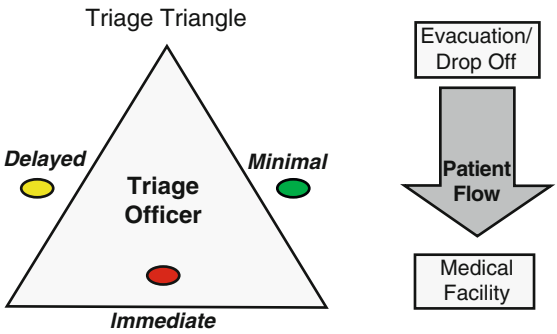
Trauma readiness is a daily preoccupation, particularly tough for units with infrequent trauma and rare opportunities to put plans into practice. Rehearsal of the MASCAL plan with real people in litters or beds during exercises will identify vulnerabilities better than by brainstorm or table top drills. Practice with both continuous patient loads and sudden surges, as the demands are different. Nearly all exercise after-action reviews identify breaks in command, control, coordination, and communication as the major "opportunities to improve" these MASCAL plans.

Response

During the Event

Successful trauma response hinges on effective communication and use of available resources. Employ elements of your MASCAL plan with every injured patient to exercise procedures and to develop "muscle memory" for bigger events. Since the formal MASCAL plan is initiated only when the top medical official decides that resources cannot keep up with medical demands, many units never need to launch the full plan. But the overload may be hard to recognize if a "slow burn" continuous stream of casualties, no one by itself too much for the facility, steadily depletes resources (a particular risk for Level 1 and 2 units). Sudden "flood" MASCALs are usually easily recognized, even before the wounded arrive at the facility.

If advance warning is received, preposition personnel in accordance with your MASCAL plan and anticipated needs. Notify all on-duty personnel and make sure



Mark sides with colors and make large enough for several litters on each side, patients' heads to center.
Triage by classic ABC's, 10-15 seconds per casualty. 1st sweep: assess/treat two A's: *Arterial Hemorrhage an Airway*.
2nd sweep *Breathing* and *Circulation* and document injuries, vital signs, treatments and times on casualty card or trauma form.
3rd sweep, *Disability* with rapid neurological exam and GCS and *Exposure* to look for missed injuries and portect from hypothermia.
Identify patients for surgery and transport at any point. Treat shock with IV and careful hypotensive resuscitation, titrating fluid to mentation to keep systolic BP ~ 60 mmHg to prevent end organ damage while reducing blood loss from a higher circulatory pressure.

Fig. 2.3 Triage triangle system used for field triage of multiple casualties and prioritization for evacuation

you have reliable methods in place (pagers, runners, public address system) to activate a full recall of all key off-duty personnel. Close proximity of living areas for personnel can minimize notification and response times. MASCALs rarely happen when your hospital is empty, so you must incorporate a plan for expanding bed capacity as well as relocation or discharge of current inpatients. Security forces can be deployed and the manpower pool can be mobilized in advance to be ready as runners, litter bearers, blood donors, and other non-provider responders.

While any unit can quickly find itself in a "casualty scene" response, such as when local blast casualties flood its gates, Level 1 units may be more frequently called to initiate hasty on-scene triage and response near hostile fire. A quick survey of the scene will define security issues, as well as the number and nature of injuries. An effective tool in outdoor response is the *triage triangle* (Fig. 2.3), allowing the triage officer (TO) to move around the center to quickly assess each patient and to direct interventions as needed to "Treat and Transport".

Level 2 and 3 triage is better optimized within the treatment facility with prepositioned personnel and equipment. You will almost never perform the television type of triage (such as seen on the popular series M.A.S.H) where all the casualties arrive at once and you run from patient to patient barking orders. You will most often receive widely spaced waves of casualties of two to eight at a time, corresponding to the evacuation vehicle capacity. Do not expect them to arrive or to be off-loaded from the vehicles in order of acuity, which is why your job of continuous triage and reassessment is so critical. The spacing does allow time for each group to be evaluated and treated, but you must move casualties promptly out of the triage area to be ready for the next arrivals.

Hospital Level Triage and the "Triage Officer"

An effective triage officer (TO) is the key to MASCAL success and should be the unit's most experienced combat trauma provider. A senior surgeon is ideal, if other surgical personnel are available to man the operating room, but the TO should not be the sole surgeon. The TO commands the trauma triage scene, but will require other coordinators to attend to elements such as communications, security, and transportation. The TO role demands rapid assessment and decision making: "right, wrong, but never uncertain!" The only wrong decision is indecision, and arterial bleeding and airway are trump cards as patients are sorted into classic NATO immediate, delayed, minimal, and expectant categories (Fig. 2.4). The TO sorts casualties, identifies immediate life threats, and directs other team members to implement critical interventions such as tourniquets, airway management, vascular access, or thoracostomies.

The TO should be located in a position that allows access to all incoming casualties and easy communication with the other key personnel and MASCAL leaders. This is often best achieved by creating a one way "funnel" for patient movement into the facility, with the TO positioned at the narrow point that only allows for one or two patients at a time. This position should be located at or near a centrally-located Casualty Tracking Board. The tracking board assures visibility for all casualties, serving as a hub for triage, treatment, nursing, and patient

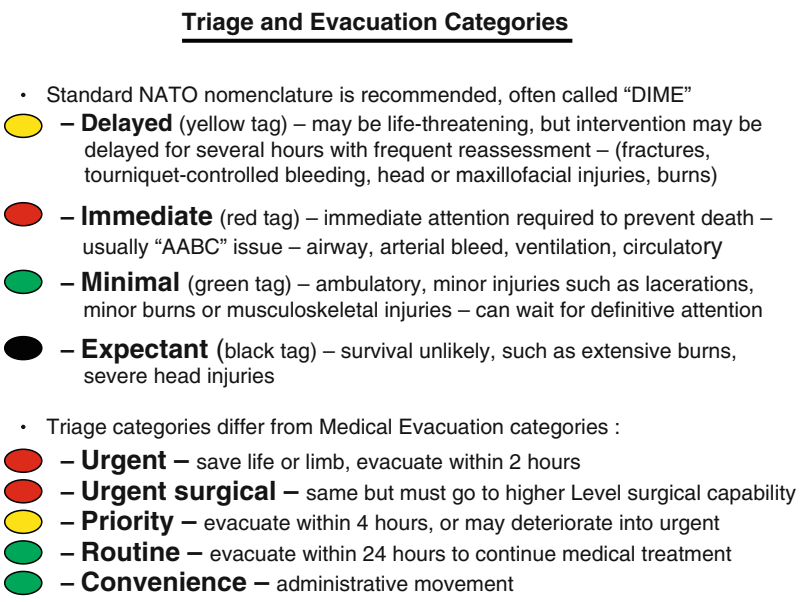


Fig. 2.4 Color coded scheme for DIME system of triage classification (*top*) and separate scheme used for medical evacuation (MEDEVAC) chain

administrative personnel to update critical information and coordinate care. The TO job does not end at the initial triage, but includes continuous triage and prioritization of patients for movement to the CT scanner, operating room, ICU, and wards. We found that having the TO, the chief Emergency Department Nurse, the hospital bed manager, and the senior Anesthesia provider all located in this spot allowed for improved communication to prioritize and facilitate patient triage, bed assignments, and movement from the ER to the OR or wards.

The TO performs rapid but focused individual patient assessments, usually spending about 15 s per casualty with each sweep. The sick are sorted to receive appropriate treatment, the minimally wounded are moved out of the stream, and the dead or hopelessly injured are sent to the expectant area or morgue. The TO then re-triages the casualties, rapidly checking for any change in status, adding detail to the exam and looking for additional injuries. There will always be mis-triage! The key is to have a system in place to identify them early, notify the TO, and re-triage them appropriately.

Figure 2.5 outlines the setup and triage operation used at the Baghdad Level 3 hospital. In this model, the senior surgeon conducts hasty triage of casualties as they enter the emergency reception area, quickly assessing consciousness, mechanism of injury, scope of apparent wounds. The most severe immediate surgical patients are sent to one of three intensive resuscitation bays, less seriously injured patients sent to

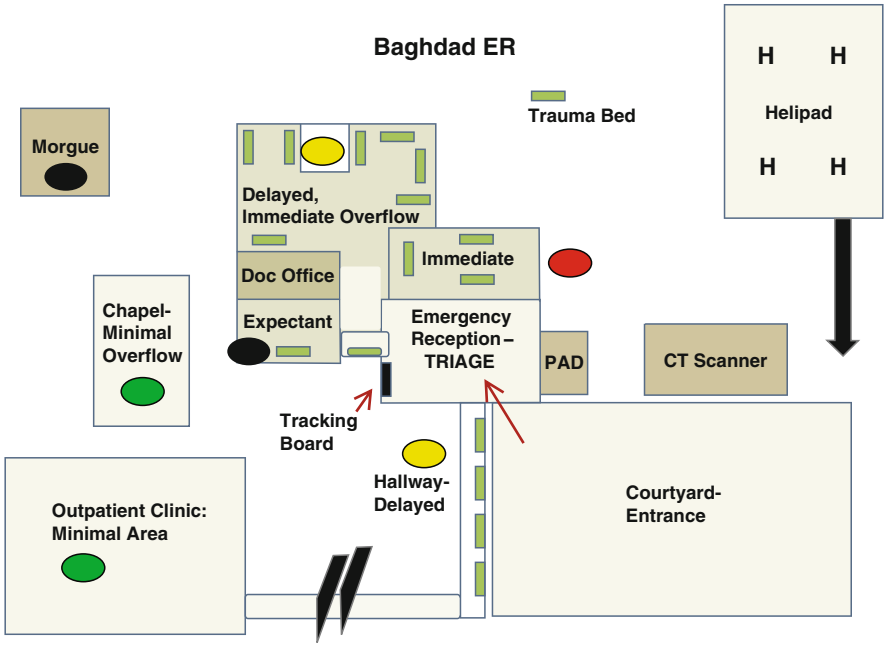


Fig. 2.5 Physical layout and organization used for triage at the Level 3 Combat Support Hospital in Baghdad, Iraq during Operation Iraqi Freedom

a seven-bed delayed area with similar intensive resuscitation capability. Other delayed and non-ambulatory patients are assigned litters in the hallway away from the emergency room. Minimal patients can be led to the outpatient clinic for evaluation and treatment. Don't forget to use your primary care and outpatient assets – they are invaluable for managing these lesser injured patients. Patient Administration personnel positioned at the entrance simultaneously place a trauma packet with each patient, while the nursing coordinator records the trauma number and nature of injury by the assigned bed number on a Casualty Tracking Board. Medics immediately fasten the trauma number bracelets on casualties upon arrival to the assigned litter. Patient flow should ideally be linear, one way in, one way out with security to control access to the triage and treatment areas. Disarm all casualties and confirm "safe" status in trauma bed. Have patient administration personnel maintain accountability for military equipment and weapons. Secure personal effects, to include any amputated body parts, and label clearly with patients' trauma numbers.

Identification of patients is critical, and many systems exist (SSN, trauma registry numbers, and others.). Keep in mind that no system is infallible, and great care must be taken to avoid confusion as to patient identity. For example, confusion among three severely injured casualties with adjacent numbers and similar devastating injuries resulted in a mismatched blood transfusion, and a more random assignment of numbers was adopted to make distinctions among patients more apparent. The importance of careful confirmation of trauma registration number with identity bracelet prior to interventions such as blood transfusions cannot be overemphasized.

The Level 2 or 3 TO is also responsible for prioritizing patients for operative intervention. These decisions can be tough if casualties arrive in wave fashion, as someone with more urgent injuries may arrive in the next group. Once operating tables are filled, additional urgent surgical patients must be managed through temporizing measures with techniques from ATLS and Tactical Combat Casualty Care until the operating room is available. The TO should assign personnel to specific trauma treatment beds, with orders to fully evaluate and stabilize their assigned patient before moving on to a different task. Avoid the "butterfly effect" where providers flit from bed-to-bed without taking responsibility to direct medical care or document findings, resulting in worthless duplication of assessment and delays in appropriate treatment.

Some of the incoming patients may have received various pre-hospital treatments, or even surgical intervention at a Level 2 or local civilian hospital. Often they arrive with little to no documentation of what has been done to them. However, even if they arrive with complete records they should be evaluated and triaged as if they were newly injured. Transport and evacuation time between facilities can result in dislodged lines, occluded airways, recurrent shock, or the presentation of missed or inappropriately managed injuries.

Rules of engagement during a multiple trauma or MASCAL event dictate life and limb-saving interventions only. The ATLS ABC's are very good, with control of major arterial bleeding as the first priority. Victims of penetrating trauma often do not need cervical spine stabilization, but blast and vehicle-injured patients

usually do. The FAST (Focused Assessment with Sonography in Trauma) exam can be a helpful adjunct to rapidly identify surgical candidates with intra-abdominal hemorrhage, but it is operator-dependent and may not be definitive. Only chest and pelvis films are permitted during the triage and treatment phase; other films can be done later. Be sure to keep films with the patients, as they are easily lost as patients move through the trauma chain. Many trauma patients will need the CT scanner, as its use has facilitated more accurate trauma diagnosis and management, but few need it for immediate triage. CT candidates must be stable and resuscitated before going into the scanner. An on-site radiologist can expedite scanner throughput.

Military physicians are tasked to provide the same role of care in the deployed setting as in the US. In the urgent resuscitation Level 1 environment, providers may be pushed to render life-saving care outside their specialty training, but most Level 2 and 3 units are staffed with sufficient expertise. A MASCAL is not the setting to learn new techniques, and a capable provider should be engaged as soon as possible, particularly if a provider encounters difficulty in performing a treatment or procedure. For example, if a primary care or emergency provider has trouble with securing an airway, an anesthesia provider should be promptly summoned. Responsibilities and authority need to be defined in advance: an emergency physician should usually defer to the operating surgeon in triage and care decisions. When personnel step out of assigned roles, they can degrade the unit's performance.

Documentation of care is critical. Assign a recorder to each trauma table who can accurately complete the casualty card or trauma sheet. If documentation is left until after the event, fatigue and degraded recall may make accurate reconstruction impossible. In Baghdad, we found that despite our most diligent efforts, urgent surgical patients were rushed to the operating room without supporting documentation (another factor in the blood transfusion mismatch). We developed a simple bright yellow cover sheet that had the pseudo-SSN, and key studies, meds, blood products, and diagnosis. This sheet always remained with the patient, even if more detailed trauma sheets needed to follow later.

In addition to the TO, an overall scene or incident commander or coordinator can maintain "big picture" focus to call for specific additional assistance and to maintain movement of patients out of the emergency treatment area in order to prepare for the next wave of casualties. Hemodynamically stable delayed patients can be admitted to a holding bed or ward to complete studies and treatment or surgery when OR and CT demands have slowed. Non-surgical medical providers can care for delayed and minimal casualties away from the emergency area to decompress scene. A surgeon should sweep these areas to prioritize delayed patients in the operative queue and to reassess clinical status.

High visibility events may trigger immediate inquiry from higher headquarters or government officials, especially if "high value" or visibility victims are involved. Frequent updates of senior officials and commanders may be required; build current contact lists of "need to know" officials before an event.

Special Considerations: Mental, Behavioral Health and Spiritual Needs

The wounded certainly benefit from ministry team comfort and encouragement, but unit and family members who accompany injured patients also have anxiety and grief burdens to be addressed while awaiting news about loved ones' status. A chaplain can be an invaluable advocate and assistant to calm units and families and to keep them updated, but other personnel may also meet many of these needs with attentive compassion. Remember that members of a unit who bring their wounded buddies for care may be unaware of their own injuries due to the "adrenaline of battle". Have a low threshold to register them with trauma numbers and to appropriately assess them as casualties.

Psychiatric casualties present a difficult management challenge, particularly during a MASCAL scenario. Although not physically injured they can significantly disrupt your team function and monopolize the time of key personnel that are needed elsewhere. You should be fully prepared for this; integrate a disruptive psychiatric casualty into your MASCAL practice exercises (your team will quickly realize how incredibly difficult they can be to manage) and have a designated mental health professional or team as part of your standard MASCAL response.

One of the hardest missions may be to care for your own injured personnel. While focus may be sustained during emergency evaluation and treatment, special attention for your personnel will be essential during the "reset" phase when the full weight of the strain and loss is experienced. Common responses you may encounter among your personnel are inappropriate or disproportionate outbursts of anger, major sleep disturbances with resultant fatigue, and major depressive symptoms. Do not ignore these warning signs or just hope that they will go away.

Route

Transport and accountability must be inextricably interwoven. Dedicated transport personnel should meticulously record every patient's movement from the triage and treatment areas, noting the destination on a Tracking Board or log. It is very easy to lose control in the confusion of large events. In Baghdad, following the bombing of a high official's home, a final tally of casualties and dispositions took more than 2 days due to inaccurate record keeping. Any movement of military or contract personnel must include notification of unit commander or supervisor.

A patient transfer decision considers diagnosis, condition, Level of care required, and expected prognosis and recovery. Most Coalition combat wounds will require evacuation to a Level 3 facility, with subsequent transport to a Level 4 or 5 for follow on care and rehabilitation. Once patients reach a Level 4 facility, they are

unlikely to return to theater. There is a big difference between "snatch and grab" point of injury evacuation to Level 2 or 3 facilities, and inter-facility transport of critically ill or injured patients. Movement of these patients from one higher Level facility to another requires special planning and coordination, as many will require complex monitoring and care en route. If possible, avoid evacuating an unstable patient because military helicopters and tactical vehicles are poor resuscitation platforms (see Chap. 34). Adequate space must be assured for critical care attendant to be able to access monitors and lines.

Reset

Triage stops when the last patient has been moved from the emergency triage and treatment area. Once transport has been finalized and patient documentation completed, the care team should begin to recover and to prepare for the next event. Recap the event and confirm accountability for all casualties. Call in the report to higher headquarters. Lead an after action review to find points to praise as well as problem areas to improve to make the next response more effective. Do not neglect personal and patient safety concerns. The treatment area may need to be cleaned, and supplies must be rapidly restocked. Remember that "amateurs talk strategy while experts talk logistics" – if you run out of critical supplies and equipment you are mission incapable.

Ethics and Resiliency

Triage by its nature raises issues of distributive justice and beneficence. Combat triage may confront teams with challenges in deciding between care for a suspected or known enemy combatant and a US Soldier. Expectant patients, particularly with burns and catastrophic head injuries exact a huge toll on treatment teams and the victims' units and families. In OIF, severe burns of non-coalition personnel of more than 50% total body surface area were generally non-survivable, without Level 4 or 5 burn center support. A refusal to initiate care can be very tough. An ad hoc ethics committee process can be invaluable to help ratify these and other difficult decisions.

If possible, expectant and morgue areas should be in a covered location away from the rest of the patients. Position a nurse or medic to give any needed pain medications or fluids, and utilize the ministry team or other capable personnel to ease anxiety and fear and to provide comfort. Preserve dignity and treat with the same respect as other patients. Reassess after other casualties have been triaged, as clinical status may have changed and post-event unit capability may enable more intense attention and care.

Multiple trauma events are stressful, and care for the responding team members is essential. Sleep rest cycles and meals cannot be neglected. Compassion and awareness

are integral to the team refit and recovery process to address emotional needs in the wake of the horrors of devastating or fatal injuries. Unit ministry and behavioral health team attention may be as important to your team as medical resupply. Notify your higher headquarters if your facility is "black" due to staff or supply exhaustion or other constraints that temporarily prevent quality patient care.

Conclusion

Trauma triage and response are among the most important missions of US medical forces. While each unit will have unique perspectives and experiences, all will benefit from careful consideration of resources, rehearsal, response, routing of casualties, and reset. We have described a system of flexible response that can be scaled to one casualty or to dozens. Recognize the cost of trauma care, and assure rapid refit of your units' capabilities, heart, and soul. You will know the victory and thrill of a job well-done, and you will be ready to do it again.