Boston hospitals supporting patients and staff in bombing aftermath

Just before 2:50 pm on April 15, 2 postanesthesia care nurses from Beth Israel Deaconess Medical Center (BIDMC) crossed the Boston Marathon finish line.

Their elation at finishing the race soon turned to fear when they heard the first of 2 explosions. They began searching for friends and family who were there to cheer them on at the end.

“There are hundreds of stories like this,” Elena Canacari, RN, CNOR, BIDMC’s associate chief of nursing for perioperative services, told OR Manager.

What happened next made the difference between life and death for more than 250 injured runners and spectators.

Speed saved lives
Initial panic turned to action as bystanders, medical professionals, and law enforcement personnel ran to help the injured.

Within a short time, most of the victims had been carried or wheeled to a medical tent 100 yards from the finish line.

“The tent’s medical personnel quickly moved from triaging blisters, dehydration, and hypothermia to critical care triage of lost limbs, shrapnel wounds, and fractures,” says Charlotte Guglielmi, MA, BSN, RN, CNOR, perioperative nurse specialist at BIDMC.

The injured were quickly assessed, stabilized, and loaded onto ambulances, many of which were already onsite for the marathon.

Emergency medical personnel coordinated ambulance service to 8 hospitals, spreading patients across the city to avoid overloading any one trauma center with too many critical patients.

“This coordination was key and really well done by the emergency medical system; it saved lives,” notes Peter Dunn, MD, OR executive medical director at Massachusetts General Hospital.

Three people died at the scene before their injuries could be treated, but everyone who was hospitalized survived. At least 14 people lost all or part of a limb. One of those seriously injured was a Massachusetts General oncology nurse, Jessica Kensky, RN, who lost a leg.

Staff volunteered
April 15, Patriot’s Day, was a hospital holiday at BIDMC. Only 1 urgent case was running at 3 pm.

Because of the holiday, trauma surgeon Alok Gupta, MD, wasn’t operating and had planned to take his child to the finish line, which was near his home. His child was napping, however, so he decided to take a nap.

Ambulance sirens and helicopters awakened him, and he received a cell phone call
with a garbled message about mass casualties.

Dr Gupta proceeded quickly to the hospital and began directing the command center. Ten minutes after that, the injured began to arrive.

“Before OR teams could be called in, more than 50 staff members just showed up,” says Canacari, including more than a half dozen orthopedic surgeons as well as vascular surgeons, nurses, technicians, and central processing personnel.

Some came from the marathon and some from the ball park. Driving was almost impossible and cell phones were down, so they walked to the hospital.

OR nurses began setting up rooms with equipment for orthopedic and vascular procedures they anticipated would be needed.

“We had an outpouring from industry; they offered to provide whatever we needed for these patients,” notes Canacari.

Debra Martinez, BSBA, CRCST, the manager of central processing and a Brigade Command Sergeant Major in the Army reserves, was alerted by the Army immediately after the bombings and began calling her staff.

“She made sure there was enough staff to provide the needed instrumentation,” says Canacari. “It was seamless from their end.”

The first patient was in the OR 45 minutes after the first blast. By 4 pm, 6 operating rooms were running.

**Staff lingered**

Patriot’s Day is not a hospital holiday at Massachusetts General, so a full complement of surgeons and staff were working when the bombs exploded—both day and evening shifts.

Shortly after commenting that she would be leaving at 3 pm, Maureen Hemingway, MHA, RN, CNOR, clinical nurse specialist for the OR, heard her name paged overhead.

“This was unusual because I’m usually called or paged on my cell phone,” Hemingway told OR Manager.

When she answered the page, she heard: “There’s been a bombing at the marathon, and we’re not letting anybody go.”

Walking from her office to the main desk of the OR, she repeated that message to several people, telling them not to let anyone leave. She also sent 1 of the managers to alert staff in the nurses’ change area.

Hemingway then began checking to see which rooms were free. Elective cases were still running, but the schedule was beginning to wind down.

Joanne Ferguson, MS, RN, director of OR operational planning and environment of care, began gathering the staff in one area.

“We were still working on what I had heard on my page,” notes Hemingway, “until Dr Dunn came to the OR and confirmed what had happened and that the hospital disaster plan had been implemented.”

Once the disaster plan was implemented, some staff were asked to be on standby in different locations, and others were assigned to be runners.

“It was tough for them to leave the OR because everyone wanted to stay and help,” says Dr Dunn.

“We asked staff to go to the lounge and wait for further instructions, but they continued to drift back to the control desk because everyone wanted to contribute,” notes Hemingway.

The first patient was in the OR at 3:30 pm, and within about 7 minutes, 4 more patients were brought into ORs. Two less acute cases were done later in the evening, for a total of 7.
‘War zone’ injuries seen

The injuries and the circumstances surrounding this incident were unusual compared to anything previously seen in emergency rooms and ORs in Boston.

“Patients had injuries that are seen in a war zone, not from auto accidents, and so many with severe injuries arrived at once and without identification,” says Hemingway.

Emergency department personnel at Massachusetts General put wristbands on patients, identifying them as Disaster Victim 001, Disaster Victim 002, and so on.

“We were a little worried about the blood coming up from the lab going to the right patient because of the lack of identification,” notes Ferguson. An OR nurse was assigned to make sure the correct blood got into the correct room.

Investigators asked surgeons and nurses to save and catalogue the bits of shrapnel and other debris removed from patients.

The nurses were careful to isolate any foreign bodies removed from wounds, putting them in specimen containers and plastic bags to be turned over to the FBI.

“We assigned 1 nurse to be the liaison between the OR and the FBI,” says Ferguson. “We are used to holding onto bullets from gunshot victims, but this was not true in this situation.”

‘Friday lockdown brought new challenges to patients and staff’

“Taking care of trauma patients is something we train for and know how to do. We move into high gear and take care of them,” says Maureen Hemingway, MHA, RN, CNOR, clinical nurse specialist for the OR at Massachusetts General Hospital.

But what happened on Friday, April 19, was new and challenging.

“On Monday we knew there was a bombing and we were getting [the] injured; on Friday we didn’t know what was going to happen,” says Hemingway.

With 1 bombing suspect killed overnight and another on the loose, and not knowing if the suspects were part of a larger conspiracy, state and local officials issued a directive at 8:40 am for hospitals to “shelter in place” and for residents to “stay in their homes.”

Local police and the FBI were searching the city and surrounding areas.

Even the term “shelter in place” was new to staff; lockdown was a more common term, notes Dawn Tenney, MSN, RN, associate chief nurse, perioperative and GI endoscopy services at Massachusetts General.

“Being on lockdown and having no idea if there were bombs outside or if someone was going to blow up the hospital was frightening,” says Hemingway.

Many of the elective cases had been cancelled, and “staff were on edge,” says Tenney.

“Their families were at home, and they couldn’t be together. They didn’t know what was going to unfold.”

There were many questions:

- What was the news telling us?
- What was the command center telling us?
- We’re safe, but what about our homes and families?
- When can I leave?
- Will I be safe?
- When can I go home?

The OR leadership team worked to keep staff informed. One team member went to the command center on a regular basis and brought updates to the staff and managers.

Access to the hospital had been restricted to one entrance, and staff were told to wear their IDs to move to other buildings on the campus.

Because the subways, buses, commuter rails, taxis, and hospital shuttle services had been shut down, the Thursday night staff and patients ready for discharge on Friday remained at the hospital.

The materials management office coordinated sleeping arrangements for staff and provided them with personal care items such as toothbrushes and towels.

By early afternoon, patients and some staff were allowed to go home because the search had started to focus in one area.

The evening staff were told it was safe to come to work, says Tenney, but most of the day staff did not leave until late afternoon and early evening.

As the search finally ended with the capture of the second suspect, the lockdown was lifted and staff, patients, and families were allowed to go home.
just 1 or 2 victims, and there was a lot of shrapnel from these patients to catalogue,” she says.

**Lockdown implemented**
BIDMC went into lockdown shortly after the bombings.

About 40 police officers, FBI agents, and special agents screened anyone trying to enter the hospital—even staff with IDs.

“They were supportive,” says Guglielmi, “but they wanted to make sure that person was an employee or had a family member in the hospital.”

Law enforcement personnel also wanted to see if anyone might have a fragment of information they could use, such as pictures on their cell phones from the event.

Massachusetts General decided not to go on lockdown after consultation with Bonnie Michelman, director of police and security. She deployed her officers to secure the hospital campus, support families navigating through the hospital, and work closely with local and national law enforcement officials.

**Families reunited**
Lack of patient identification and separation from family members proved challenging.

Some of the injured were from out of state. Others had family members and friends admitted to other hospitals.

“Family members arrived at BIDMC seeking information about their loved ones, but OR staff had not yet confirmed identities,” says Guglielmi.

Finally, Susan Dorion, MSN, RN, nurse manager of the perianesthesia areas, worked to collect all of the contact information from the families and partnered with social workers to make sure family members were connected to the correct patient.

“We wanted to make sure no family contact information was lost,” notes Guglielmi.

**Staff supported**
It’s not only the injured but also the caregivers who need to make sense of what happened on April 15. They will need to engage with one another, and some will need assistance from counselors.

On April 17, Canacari gathered some 200 OR staff for a caring meeting. They sat in the round and discussed what had happened and how they felt about it. “We told them that we expected them to care for themselves as well as each other,” she says.

A direct hotline has been set up for staff to call anytime, and an employee assistance program is available.

“It was a life-changing experience for me, and I’ve been around a long time,” says Guglielmi. “Many of our staff are young, and we want to help them work through this over the next weeks and months.”

The Massachusetts General employee assistance program responded to the event immediately, alerting staff to opportunities for group or individual discussion sessions to share their experience. In addition, some front-line providers were contacted directly to offer support.

Massachusetts General chaplaincy members made rounds on the units to minister to the staff as well as the patients.

On April 25 and 26, Massachusetts General put together a healing event with volunteers offering massages, meditation sessions, yoga, and other opportunities to help staff.

These informal gatherings were helpful for some, others liked the larger gatherings, and others preferred not to participate and dealt with the events privately.
“The reality is, we all rise to the occasion and take care of patients extremely well. It is important also to take care of the care givers,” says Canacari. “We are proud of our staff and all of Boston’s health care community.”

—Judith M. Mathias, MA, RN