Designing and Executing a Bilateral Disaster Preparedness Exercise with the Japanese Maritime Self-Defense Force

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ORGANIZATIONAL INFORMATION

U.S. Naval Hospital Yokosuka is located on U.S. Naval Base Yokosuka, in the City of Yokosuka, 30 miles east of Yokohama, Japan. U.S. Naval Hospital Yokosuka is the largest U.S. military medical treatment facility in mainland Japan. A Level IV, 47-bed hospital, expandable to 197 beds in the event of a contingency or wartime situation, U.S. Naval Hospital Yokosuka serves approximately 43,000 beneficiaries living throughout the Greater Tokyo metropolitan area. U.S. Naval Hospital Yokosuka also receives approximately 300 referral patients annually from smaller, outlying branch medical clinics located throughout Japan and Korea.

U.S. Naval Hospital Yokosuka has been in continuous operation since 1950. The current main hospital structure was dedicated in 1987. The core hospital was actually built on an earthquake proof foundation that is designed to "roll" laterally in the event of a tremor. Situated in the southern tip of the vast Kanto Plain region on the island of Honshu, U.S. Naval Hospital Yokosuka is located near Yokohama, a major Japanese industrial city and seaport.

From December 1999 to December 2000, the writer served as Head of the Plans, Operations, and Medical Intelligence (POMI) Department at U.S. Naval Hospital Yokosuka. As part of Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requirements, U.S. Naval Hospital Yokosuka was required to conduct two mass casualty/disaster preparedness drills each year.

Japan Maritime Self-Defense Force (JMSDF) Hospital Yokosuka is located on JMSDF Base Yokosuka, adjacent to U.S. Naval Base Yokosuka. JMSDF Base Yokosuka and U.S. Naval Base Yokosuka share dry dock and ship repair facilities, as well as inner harbor transit ways.

JMSDF Hospital Yokosuka is a 50-bed military medical treatment facility owned by the Japanese Maritime Self-Defense Force and serves the 3,000 JMSDF personnel assigned to the base. JMSDF Hospital Yokosuka also provides inpatient, outpatient and referral services to the many JMSDF ships assigned to the base.

A BRIEF ACCOUNT OF THE PROBLEM

Six years before the September 11, 2001, terrorist attacks upon the United States were perpetrated, a group of Japanese terrorists placed a number of containers containing Sarin nerve agent in the underground subway network in Tokyo, Japan. Thousands of early morning commuters were exposed, hundreds were subsequently hospitalized and eleven persons were killed. The threat of serious mass casualties resulting from an event other than a typhoon or earthquake had once again hit Japan. U.S. military medical planners concluded that the need for joint cooperation among all military medical facilities was critical. This case report details the method healthcare administrators applied at U.S. Naval Hospital Yokosuka to successfully plan and execute a bilateral disaster preparedness exercise.

EXPLANATION OF THE PROBLEM

During the early morning hours of March 20, 1995, five members of the religious cult Aum Shinrikyo placed containers containing the deadly nerve agent Sarin in carriages in three of Tokyo's ten subway lines. Approximately 5,000 morning commuters were exposed to the nerve agent and required medical attention. Eleven persons were killed as a result of exposure to the deadly toxin. This attack caused all U.S. military bases in Japan to go into a state of high alert. U.S. military officials realized then that our medical facilities in Japan were woefully unprepared to handle a situation where hundreds or even thousands of people were exposed to any type of biological or chemical agent. U.S. military hospitals in Japan, and in other foreign countries, were staffed to manage peacetime incidents, with no more than two or three seriously injured patients appearing in the emergency room at one time.

Prior to 2000, participation from JMSDF Hospital Yokosuka in any mass casualty drill conducted by U.S. Naval Hospital Yokosuka was minimal and primarily in an "observer" capacity. Due to the close proximity of JMSDF Hospital Yokosuka to U.S. Naval Hospital Yokosuka, it was only a matter of time before the two neighbors would collaborate on a mutually beneficial mass casualty plan. Neither hospital's emergency rooms were sufficiently equipped or staffed to handle more than four or five seriously injured patients at one time. Past mass casualty drills at U.S. Naval Hospital Yokosuka were conducted without the assistance of any external resources. Five years after the Sarin attack in the Tokyo subways, U.S. Naval Hospital Yokosuka was still operating under the assumption that the base was somehow immune from disaster. Much of this thinking changed when the writer assumed duties as the Head of the POMI Department.

The responsibility of planning and executing mass casualty drills fell upon the shoulders of the POMI Department Head. Prior to 2000, there had been a few attempts to engage the JMSDF Hospital in joint mass casualty exercises. In the

summer of 1999, several members of the JMSDF Hospital attended a mass casualty drill conducted at U.S. Naval Hospital Yokosuka that involved six patients. The JMSDF members observed how their American counterparts organized and carried out the drill and how patients were processed through the hospital from initial triage to admission. Past hospital commanders from both sides had met and were acquainted with each other and had expressed the desire for their respective organizations to work on joint exercises. Not surprisingly, language and cultural barriers limited effective communication of goals and objectives. Also, the JMSDF Hospital, at that time, did not have any requirement mandated by the high command to conduct any type of mass casualty response drill. This was a curious phenomenon, especially in light of the fact that the Sarin gas attack in Tokyo occurred less than 200 kilometers (120 miles) away.

MANAGEMENT AND ADMINISTRATIVE DECISIONS

In 2000, a new POMI Department head assumed his duties at U.S. Naval Hospital Yokosuka. The POMI, or "Medical Planner" as he was called, had several distinct advantages over his predecessors. To begin with, the Medical Planner was of Japanese descent and spoke fairly fluent Japanese. He had been raised in Japan and had spent a total of fourteen years growing up in Japan and was very well acquainted with Japanese culture and tradition. Japanese language and cultural barriers that previously existed were no more. The Medical Planner also had the advantage of having been a POMI officer in the Army, eight years earlier, and had experience in planning mass casualty exercises involving medical resources from other hospitals and municipalities.

Developing a New Model for Joint Cooperation

Shortly after assuming his duties as the POMI Department Head, the Medical Planner met with the commanding officer of U.S. Naval Hospital Yokosuka, Captain Jack Smith. Captain Smith had assumed command of U.S. Naval Hospital Yokosuka a year earlier. Shortly after he had assumed the reins of leadership, Captain Smith realized that U.S. Naval Hospital Yokosuka needed to be prepared for any type of mass casualty situation, whether prompted by natural disaster (typhoon or earthquake) or by means of terrorist action. He provided his Medical Planner with guidance on how U.S. Naval Hospital Yokosuka would acquire a greater level of emergency preparedness. Captain Smith's new model for mass casualty readiness involved the cooperation of JMSDF Hospital Yokosuka. The commanding officer reasoned that if both hospitals worked together during a mass casualty situation, a synergistic effect would result, thus enabling both hospitals to function more effectively than by working alone. In order for effective emergency patient treatment and care to take place during a time of chaos, the two hospitals would need to train together and train often. A new model for joint cooperation during mass casualty situations was beginning to emerge.

The Key Players

At the conclusion of a week of Japanese New Year's festivities in January 2000, an initial "let's get acquainted" meeting was scheduled between U.S. Naval Hospital Yokosuka's POMI officer, his assistant and the key medical planners from JMSDF Hospital Kameda. In attendance at this important meeting were the head of the JMSDF Hospital's Medical Planning Office, Commander (CDR) Mitsui; Commander Mitsui's primary assistant, Lieutenant (LT) Shibuya; U.S. Naval Hospital Yokosuka's Japanese public relations officer and interpreter, Ms. Megumi Kurozawa; the Assistant POMI officer for U.S. Naval Hospital Yokosuka, Hospital Corpsman Second Class (HM2) Gary Suniga; and the author. The JMSDF members were surprised, yet pleased that the new American POMI officer was conversant in Japanese. Through a spirited, but polite discussion, the group concluded that it would be in everyone's best interest if the two hospitals cooperated in the event of a mass casualty situation. At the conclusion of the initial hour-long meeting, an agreement was reached for the two groups to begin planning for a joint disaster preparedness exercise that would be conducted the following September, nine months in the future. It was also decided that the key players representing both hospitals would meet once a month at scheduled times and places, with the venue for each meeting rotating between the JMSDF Hospital and U.S. Naval Hospital Yokosuka.

Monthly Mass Casualty Planning Meetings

Meetings were conducted each month according to the agreement established at the January meeting. Due to his Japanese language ability, the POMI officer did not require Ms. Kurozawa's presence, during the meetings. However, Ms. Kurozawa volunteered to take notes and summarized each meeting's discussion in writing in both English and Japanese. She also translated the Japanese portion of the discussion for HM2 Suniga's benefit. Over the course of several monthly meetings, a number of new strategies designed to encourage joint cooperation emerged. Five of the more important strategies, briefing summarized below, were:

1) the name of the annual joint mass casualty exercise would be "Bilateral Disaster Preparedness Exercise" and it would be scheduled during the month of September;
2) a Memorandum of Understanding would be drafted and signed by the commanding officers of both hospitals, thus bestowing official recognition on the joint endeavor and providing a mechanism for its continuance in the future;
3) both hospitals would share technology and information pertaining to emergency medical equipment;
4) interaction between the two hospitals would be ongoing; and
5) the disaster drill after-action report and lessons learned would be translated into English and Japanese and representatives from the U.S. Naval Hospital would attend the debriefing conducted at JMSDF Hospital Yokosuka and vice versa.

The Bilateral Disaster Preparedness Exercise

The writer took the lead in writing the Bilateral Disaster Preparedness Exercise operations order—the official plan on how the drill would be organized and executed. Using a standard military operations order format, the first draft of the Bilateral Drill operations order was four pages in length, double-spaced. The operations order outlined the Situation (a scenario wherein a bus carrying U.S. Navy sailors on their way to training collides with a dump truck on the U.S. Naval Base Yokosuka, causing numerous injuries and one fatality); the Mission- (to treat 20 or more casualties using the facilities of both hospitals); the Execution- (an approximate time line on how the drill would progress); Service Support- (a list of equipment and supplies needed to support the drill and a by-name list of personnel who would be responsible for providing the items listed); and Command and Signal- (since new Motorola hand-held radios were going to be used for communications purposes, a list of call signs and radio channels). Ms. Kurozawa translated the operations order into Japanese and faxed the four-page document to CDR Mitsui at the JMSDF Hospital in early March 2000. CDR Mitsui and LT Shibuya made several recommendations for additions to the operations order, all of which were added by the beginning of April.

Memorandum of Understanding

During the April 2000 Bilateral Disaster Preparedness Exercise meeting held at JMSDF Hospital Yokosuka, CDR Mitsui presented the writer with a draft Memorandum of Understanding (MOU), a three-page document carefully translated into English by LT Shibuya, an English literature major and graduate of Japan's prestigious Waseda University. The draft MOU identified both hospitals by name and stated that cooperation between the two hospitals was essential in order to save lives during a mass casualty situation, which could occur at anytime. In classic Japanese style, the draft MOU encouraged a lasting working and social relationship between the two medical treatment facilities. The writer and HM2 Suniga hand-carried the draft MOU back to U.S. Naval Hospital Yokosuka and after including points of discussion relevant to the U.S. Naval Hospital's goals and missions, presented a second draft of the MOU to Captain Smith for review. The task of crafting the MOU to the point where both sides were in complete agreement with the contents of the document lasted two months, with numerous faxes and phone calls being made in between scheduled monthly meetings. By the end of the summer of 2000, just one month before the inaugural Bilateral Disaster Preparedness Exercise date, the official Memorandum of Understanding between U.S. Naval Hospital Yokosuka and the Japan Maritime Self-Defense Force Hospital Yokosuka was signed by the commanding officers of both organizations. The final version of the Memorandum of Understanding was six pages, double-spaced.

Sharing of Technology and Information

During the course of the monthly Bilateral Disaster Preparedness Exercise meetings, each side gained a better understanding of not only how their counterparts planned and conducted business on a day-to-day basis, but also acquired knowledge of the various types of equipment and supplies that were available in the other hospital's emergency response inventory. Each side was continually amazed at the resources that their counterparts possessed. For example, in the year 2000, U.S. Naval Hospital Yokosuka lacked the technology needed to quickly and effectively decontaminate chemical or biological casualties prior to medical treatment. The JMSDF Hospital, however, had purchased an inflatable chemical decontamination shelter years earlier and had trained several teams on its operation. This state-of-the-art decontamination system could be set up in five minutes time, through the use of high-pressure compressed air pumps. Through the MOU, the JMSDF Hospital's inflatable chemical decontamination shelter would be made available for use by U.S. Naval Hospital Yokosuka for training and during an actual emergency. This was only one example of how technology and information was shared between the two partners.

Continual Interaction Between JMSDF Hospital and U.S. Naval Hospital Yokosuka

The first two monthly Bilateral Disaster Preparedness Exercise meetings were held in hospital conference rooms, with light refreshments served at the beginning of each hour- long meeting. These meetings were conducted efficiently with a meeting agenda faxed to all participants ahead of time. The monthly disaster drill meetings eventually evolved into two-hour "working" lunches, with the noon meal provided courtesy of the host for that month. Each participant was treated to a traditional lunch accompanied by polite discussion, with the business portion of the meeting occupying the second hour. These working lunches did much to further friendly and collegial relationships between the medical planners from U.S. Naval Hospital Yokosuka and JMSDF Hospital Yokosuka and fostered a heightened spirit of cooperation. In August 2000, on the eve of first Bilateral Disaster Preparedness Exercise, the medical planners from both sides agreed to a softball game and summer barbeque between the JMSDF Hospital and Naval Hospital Far East. The weekend event was widely publicized, with approximately 200 hospital personnel and their families attending. The success of this particular recreational event foretold the success of the following month's disaster exercise. Getting to know one's business partners socially would have a tremendous impact on the ability of both parties to work together.

Bilateral Disaster Preparedness Drill Briefings, After-Action Reports and Lessons Learned

Early in the disaster exercise planning process, medical planners from both sides agreed to send representatives from their respective facilities to attend the disaster drill briefings and exercise debriefings held at their counterpart's hospital. The author, HM2 Suniga and Ms. Kurozawa attended the September 2000 Bilateral Disaster Preparedness Exercise briefing held at the JMSDF Hospital one week before the exercise date. CDR Mitsui, LT Shibuya and a small contingent

of JMSDF physicians and nurses attended a similar briefing held at U.S. Naval Hospital Yokosuka the following day. Clearly, the presence of JMSDF medical planners and healthcare providers at Naval Hospital Yokosuka's disaster drill briefing did much to demonstrate the close working relationship that had developed between the two neighbors over the course of only nine months. As provided for in the MOU, the drill after-action report and lessons learned from the exercise would also be translated into Japanese and English so that both hospitals could draw conclusions and continue to develop their capability to function during a mass casualty scenario.

THE RESULTS

Nine months of meetings, numerous phone calls, faxes and a continuous exchange of ideas between American and Japanese medical planners culminated in a successful Bilateral Disaster Preparedness Drill between U.S. Naval Hospital Yokosuka and the Japan Maritime Self-Defense Force Hospital Yokosuka on Thursday, September 14, 2000.

Joint Cooperation from Start to Finish

Beginning with the application of moulage on twenty-one would be "casualties" at the crack of dawn on the morning of the drill, this exercise was underscored by joint cooperation from start to finish. HM2 Suniga headed the team that applied simulated wounds or *moulage* to the volunteer patients, with wounds ranging from blunt trauma injuries to severe lacerations. U.S. Navy hospital corpsmen and JMSDF medical technicians comprised HM2 Suniga's moulage team. Similarly, teams of disaster drill evaluators and observers were also composed of U.S. Navy and JMSDF sailors. Evidence of joint cooperation was apparent throughout the drill as JMSDF observers and evaluators observed patient treatment in the emergency room and surgery suites at U.S. Naval Hospital Yokosuka while U.S. Navy evaluators and observers watched triage and patient transport at JMSDF Hospital Yokosuka.

Direct Dial Emergency Telephone Line to JMSDF Hospital Yokosuka

As a result of a recommendation made in the Bilateral Disaster Preparedness Drill After-Action Report and Lessons Learned, a direct dial emergency telephone line between U.S. Naval Hospital Yokosuka and JMSDF Hospital Yokosuka was established. The phone line connected U.S. Naval Hospital Yokosuka's 24-hour main information desk with the 24-hour English-speaking operator at JMSDF Hospital Yokosuka, in effect creating a channel of communications that would enable either side to instantly contact the other side for emergency assistance.

JMSDF Hospital Yokosuka Incorporated into U.S. Naval Hospital's Mass Casualty Plan

As the relationship between U.S. Naval Hospital Yokosuka and JMSDF Hospital Yokosuka was being cultivated, a team at Naval Hospital Yokosuka, headed by the medical planner, had been busy rewriting the hospital's new Mass Casualty Plan, a veritable 80-page document that provided step-by-step procedures on how the hospital would respond to a mass casualty scenario. The success of the first Bilateral Disaster Preparedness Drill provided the impetus the team needed to add JMSDF Hospital Yokosuka as a necessary resource to be contacted in the event of a mass casualty situation. The JMSDF Hospital was listed in the Mass Casualty Plan directory as one of several organizations to be contacted immediately once the commanding officer of U.S. Naval Hospital Yokosuka ordered the hospital to undertake a mass casualty response.

Worldwide Television Coverage Through the Armed Forces Network

The newly created partnership between U.S. Naval Hospital Yokosuka and JMSDF Hospital Yokosuka and the success of their Bilateral Disaster Preparedness Drill was featured in a news segment televised worldwide through the Armed Forces Network (AFN). U.S. Naval Hospital Yokosuka's POMI officer, Captain Smith, JMSDF Hospital's commanding officer and LT Shibuya from JMSDF Hospital were interviewed and provided sound bites for the 5-minute news brief. The AFN journalist who conducted the televised interviews stated that the disaster preparedness drill "demonstrated a true spirit of cooperation between Naval Hospital Yokosuka and JMSDF Hospital Yokosuka." The disaster drill was also featured in that week's edition of "The Seahawk," the base newspaper for Naval Base Yokosuka.

The viability of the Bilateral Disaster Preparedness Drill and all that went into planning and executing the drill is evident today. The Bilateral Disaster Preparedness Drill has endured the test of time and is an integral part of U.S. Naval Hospital Yokosuka's annual training plan. Although key players involved in the first bilateral disaster exercise have since moved on to other challenging assignments and opportunities in other parts of the world, the same level of commitment and mutual cooperation still exists today at both hospitals.

SOURCE MATERIAL

The problem identified above was resolved through a shared vision and teamwork involving the author, the chain of command at both hospitals and participating physicians, nurses, hospital corpsmen, medical technicians and staff. The author's planning diary for the year 2000 was used to corroborate events and dates. This case report was written from the author's first-hand perspective as a key player in the administrative decisions and actions provided above.

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