

# Activities of the Japan Medical Association Team in Response to the Great East Japan Earthquake

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The Japan Medical Association (JMA) carried out a wide range of activities in response to the Great East Japan Earthquake 2011. This report introduces some of these activities.

## Establishment of the JMAT Program

About one year prior to the earthquake, the JMA's Committee on Emergency and Disaster Medicine proposed that Japan Medical Association Team (JMAT) be formed and issued a press release to that effect. The JMA decided to form JMAT on March 15, 2011, in response to the earthquake, and requested that prefectural medical associations nationwide send JMAT to the affected areas as emergency medical rescue teams.

## Overview

JMAT's main activities were to provide medical care in shelters and first-aid centers, as well as medical assistance at hospitals and medical centers in the affected areas. The scope of their activities was extremely wide, ranging from ascertaining information about medical needs and improving conditions in shelters, such as the health condition of evacuees, sanitary status, trends in outbreaks of infectious diseases, and the nutritional status of evacuees, as well as manag-

ing the health of at-home patients.

The Great East Japan Earthquake was a disaster that affected all of Japan in many ways. Since there were over 400,000 evacuees within a 500 km radius, the JMA assigned support areas to individual prefectural medical associations based on requests from the local medical associations in the devastated areas. The JMAT teams were thus dispatched to their assigned support areas (**Fig. 1**).

JMAT was in principle made up of one physician, two nurses, and one coordinator, but prefectural medical associations were requested to be flexible in organizing teams to be sent to the disaster areas. All team members, regardless of their occupational category, were covered by injury insurance at the JMA's expense and are compensated for any and all injuries occurring while they were carrying out their activities. Thanks to the participation of hospital associations in Japan and the Japan Pharmaceutical Association, JMAT teams were able to carry out many activities.

## JMAT Activities

The JMAT teams were sent by prefectural medical associations throughout Japan in response to requests from local medical associations in the disaster areas. The JMA not only coordinated the areas in which the teams provided support for

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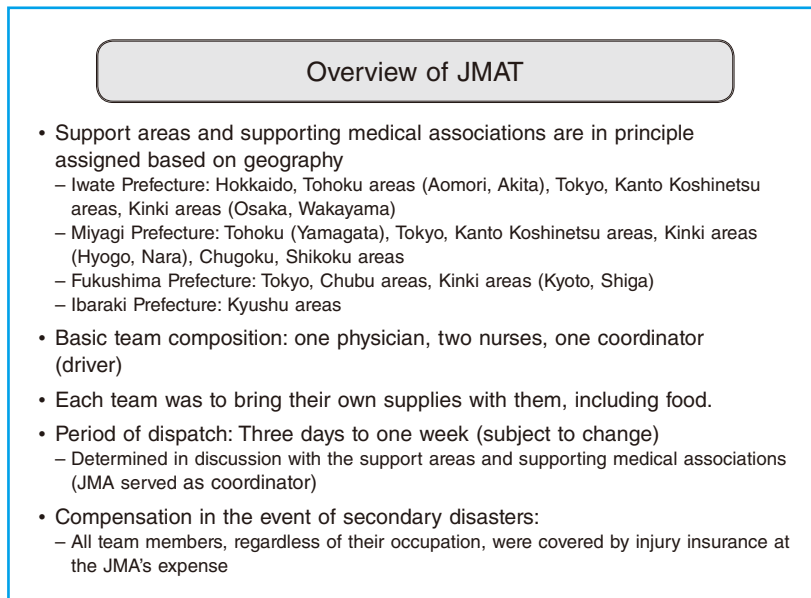


Fig. 1

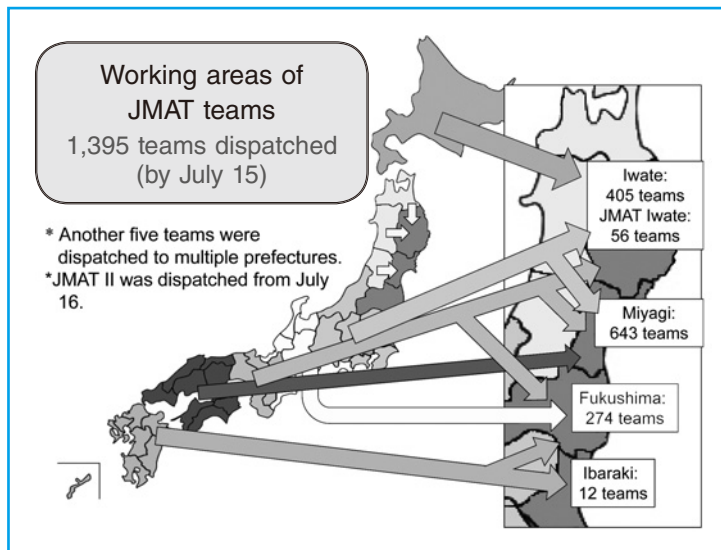


Fig. 2

effective rescue activities, but also used a “support calendar” to ensure that the JMAT could provide ongoing support chronologically and systematically. In principle, JMAT transferred their duties to local medical institutions and withdrew as soon as medical services in the disaster areas were restored. Member physicians’ participation in this program was on a voluntary basis and in accordance with the concept of

professional autonomy.

### One Hundred JMAT Teams Sent to the Affected Areas in the Month Following the Disaster

Figure 2 shows the distribution of JMAT teams sent from around the country to the disaster areas. 1,395 JMAT teams had been dispatched

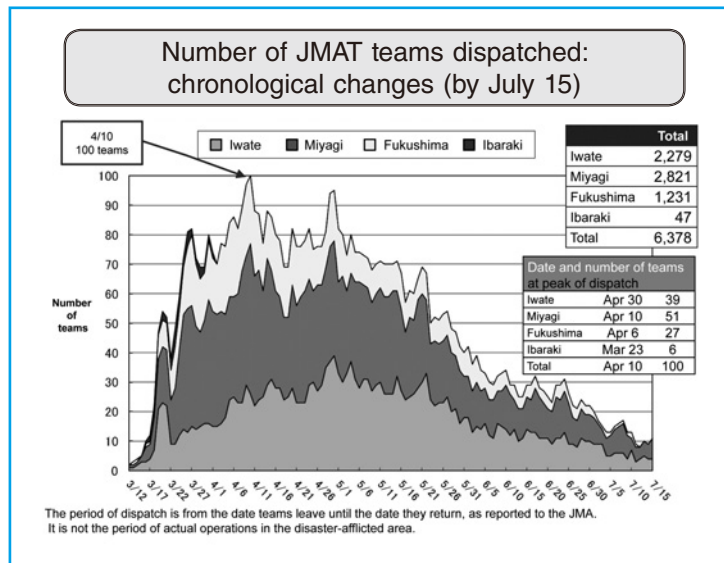


Fig. 3

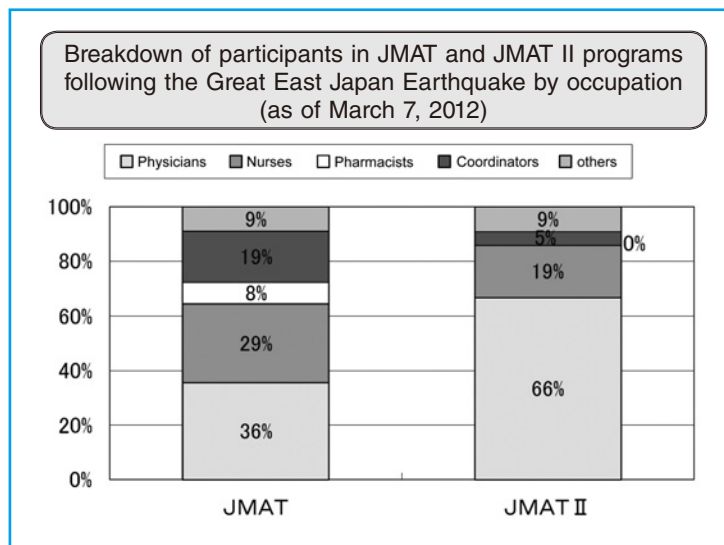


Fig. 4

to the disaster areas by July 15, 2011.

When the earthquake struck, the JMA initially assumed that about 100 JMAT teams would be needed at the same time. Subsequent analysis shows that the number of JMAT teams that were actually dispatched to meet local needs reached a peak of 100 on April 10 and the teams were sent 6,300 times in total by July 15, 2011. The teams withdrew depending on the situation in their individual disaster areas. I believe that

JMAT has become Japan’s largest medical assistance team (Fig. 3).

**Shift From the First Phase, “JMAT for Emergency Medical Support,” to the Second Phase, “JMAT II for Ongoing Support of Daily Health Care Activities”**

The JMAT teams that were dispatched for emergency medical support withdrew on July 15, 2011.

Disaster Victims Health Support Liaison Council	
(As of March 11, 2012)	
1 Japan Medical Association	10 The Japan Dietetic Association
2 Japan Dental Association	11 Ten organizations related to rehabilitation support after the Great East Japan Earthquake (The Japanese Association of Rehabilitation Medicine, etc.)
3 Japan Pharmaceutical Association	12 Japan Association of Geriatric Health Services Facilities
4 Japanese Nursing Association	13 Japan Association of Medical and Care Facilities
5 Association of Japanese Medical Colleges	14 Conference to Promote Team Medicine (Japanese Association of Social Workers in Health Services and other organizations)
6 Japan Hospital Association	15 Japanese Paramedics Association
7 All Japan Hospital Association	16 The Japan Association of Radiological Technologists
8 Association of Japanese Healthcare Corporations	17 Japanese Society of Hospital Pharmacists
9 Japan Psychiatric Hospitals Association	18 Japan Red Cross Society

\*The Cabinet Office of the Japanese Government, the Ministry of Internal Affairs and Communications; the Ministry of Health, Labour and Welfare; and the Ministry of Education, Culture, Sports, Science and Technology participated in the Council as observers.

Fig. 5

However, they were unable to sufficiently help with the recovery and reconstruction efforts in the disaster areas, which were still in strong need of health care support. Some areas had suffered from a shortage of physicians even before the disaster, and vaccinations, health checkups, and mental care were also required. The JMAT II program was created to address these situations — that is, to provide not disaster medical support but ongoing support to restore daily health care activities in the affected communities, implement various support programs, and take care of people living in temporary housing. These activities by JMAT II still continue today.

Under the JMAT and JMAT II programs, more than 7,300 medical teams were dispatched to the disaster zone. More than 3,000 physicians as well as nurses, pharmacists, coordinators, and other related people have voluntarily participated in these programs. **Figure 4** shows the percentage of participants by occupation.

### Activities of the Disaster Victims Health Support Liaison Council

In the aftermath of the March 2011 earthquake, a group which was established on March 14, 2011, as the Democratic Party of Japan's Disaster Victims Health Support Team gradually increased in size, and eventually the JMA took a central role in expanding it as the Disaster Victim Health Support Liaison Council. The President of the JMA also served as Chairman of the Council, while Dr. Yoshitake Yokokura, then-JMA Vice-President, and Dr. Takamasa Kayama of the Association of Japanese Medical Colleges (Director of the National Cancer Center and Central Hospital Director) served as Secretary-General. The JMA acted as Secretariat for the Council, the roles of which include continuous support (including consulting on the specific support to be provided), discussing issues with the Minister of State for Disaster Management, and holding teleconferences.

A list of Council members is shown in **Fig. 5**. All of the major health related organizations,

<b>JMAT Training Course on Disaster Medicine (March 10, 2012)</b>	
<b>Program</b>	
10:40 – 11:20	Overview of JMAT (Masami Ishii, Executive Board Member, JMA)
11:20 – 12:00	Humanitarian response: International guidelines and ethics (Stephanie Kayden, HHI)*
12:50 – 13:30	International standards for public health activities (Pooja Agrawal, HHI)
13:30 – 13:55	Rapid assessment in disasters (Maya Arie, HHI)
13:55 – 14:35	Sharing roles between DMAT and JMAT (Kunio Kobayashi, Chairman of the JMA's Committee on Emergency and Disaster Medicine)
14:35 – 15:15	Radiation emergency medicine (Kazuaki Koriyama, Director of the Nuclear Safety Research Association)
15:25 – 16:05	Post-mortem examination in times of disaster (Minoru Oki, Executive Director of the Fukuoka Prefecture Medical Association; member of the JMA's Committee on Emergency and Disaster Medicine)
16:05 – 16:45	Special disasters and the Civil Protection Law (Yukiya Hakozaki, Director of the First Division of the Self-Defense Forces Central Hospital)
16:45 – 17:25	Pandemic countermeasures (Taro Yamazaki, Professor at the Institute of Tropical Medicine, Nagasaki University)
17:25 – 18:00	Discussion and summary

\*Harvard Humanitarian Initiatives.

Fig. 6

including the Japan Red Cross Society, participated as members in the Council, while the Cabinet Office of the Japanese Government, the Ministry of Internal Affairs and Communications, the Ministry of Health, Labour and Welfare, and the Ministry of Education, Culture, Sports, Science and Technology participated in the Council as observers.

### **Transporting Medical Supplies to Iwate and Miyagi Prefectures With the Cooperation of the US Military**

When JMAT was carrying out their activities, there were severe shortages of medicines and gasoline in the affected areas. We asked the Japan Pharmaceutical Manufacturers Association (JPMA) to provide necessary medical supplies and pharmaceuticals. In response to this request, the JPMA was kind enough to quickly send 8.5 ton of drugs. With the support of the Harvard Humanitarian Initiative, the drugs were

transported by air in a US military aircraft from the Yokota Air Base in Tokyo to Hanamaki Airport in Iwate and the restored Sendai Airport in Miyagi. The Japan Self-Defense Forces were also responsible for land transportation.

Mitsubishi Heavy Industries also provided their private jet to send drugs from the Aichi Medical Association to Fukushima Prefecture, an area which was in significant need of medical supplies.

### **Importance of Communications Based on Real-Time Information in Responding to Unanticipated Situations**

We view crisis management as the measures to be taken in response to unexpected situations. As a humanitarian organization, the JMA made the utmost effort to improve the situation in the affected areas. To do this effectively, we really needed more detailed accurate information as well.

## Future Issues

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Some of the issues for future consideration include electronic health records using IT and various kinds of hard-copy checklists. It is also extremely important to consider ways of transferring JMAT duties to other medical relief teams and collaborating with other organizations. This is because JMAT teams should withdraw when they are sure that the local medical association's network has been restored.

We are interested in making good use of a wide variety of multimodal IT tools. We are also in discussions with the Japan Aerospace Exploration Agency (JAXA) on the possibility of using satellites for telephone conference services.

## Nation-Wide Training Course on Disaster Medicine

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The JMA held a JMAT training course on disaster medicine at the JMA office on March 10, 2012 (**Fig. 6**). We plan to hold similar training courses so that all physicians in Japan will be able to respond to any emergency case.

We will strive not only to restore the disaster-affected communities to their previous states, but also train ourselves based on the lessons learned from the Great East Japan Disaster to learn more about countermeasures and emergency medicine for possible future disasters.