

Japanese Red Cross Musashino Hospital Disaster Medical Care Response

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Contents

- The role of Musashino Hospital in regional medical care
- Disaster response
- Medical aid activities after the Great East Japan Earthquake
- Issues relating to individuals who require early medical care in an emergency (vulnerable people)

Japanese Red Cross(JRC) Musashino Hospital

General hospital located in central Tokyo handling acute-phase treatment



Total number of beds:
611

Number of emergency
center beds: 30

Key facts and figures

Results, and number of patients and personnel in past three years (FY2011)

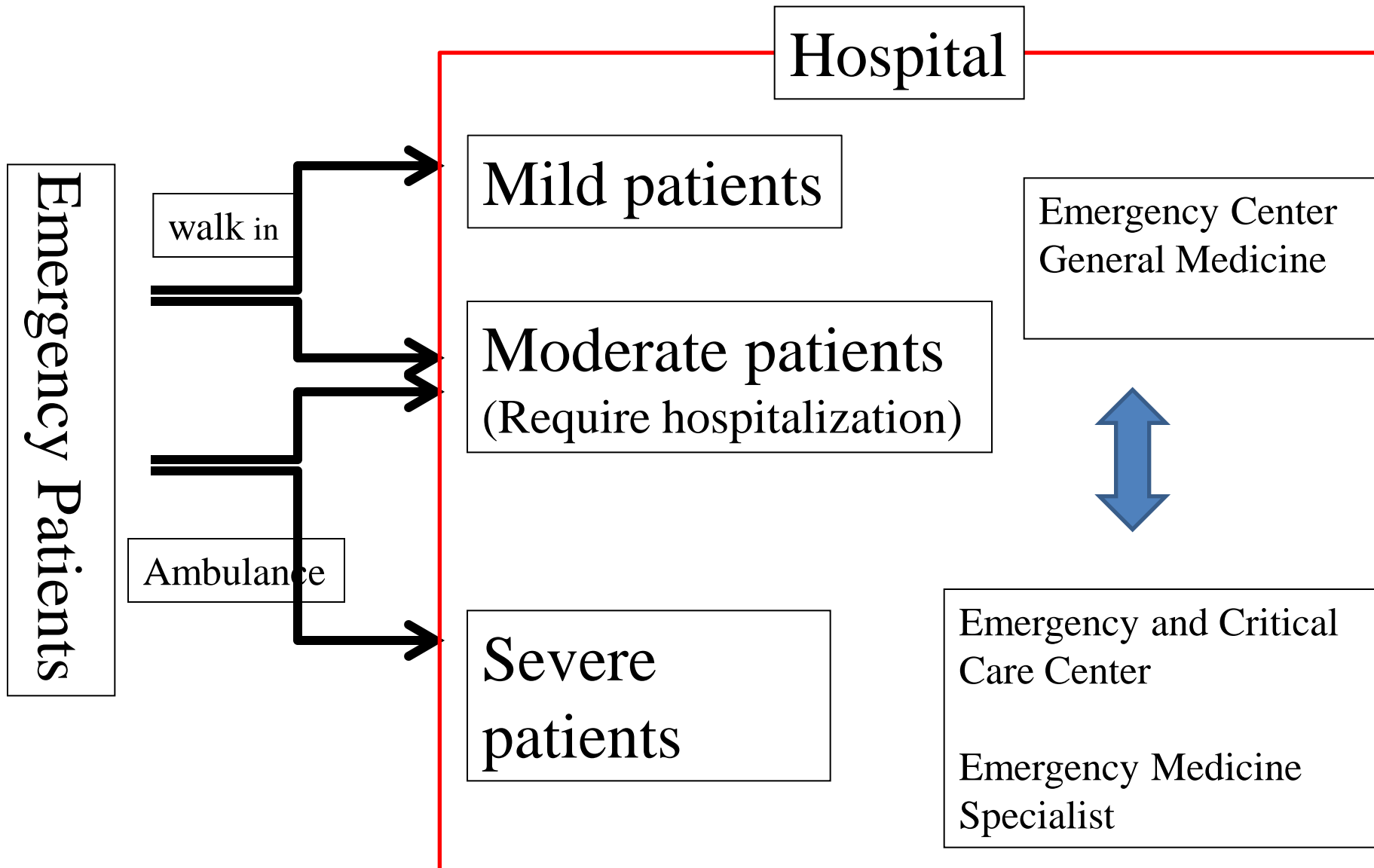
Item	FY2009	FY2010 (leap year)	FY2011
Total number of outpatients	358,938	337,691	334,464
Number of outpatients (daily average)	1,489	1,390	1,371
Number of inpatients	210,263	207,200	207,974
Bed occupancy rate	94.3%	92.9%	93.0%
Average length of hospitalization (days)	11.8	11.7	11.9
Referral rate (regional support hospital)	71.4%	73.2%	74.4%
Number of operations (surgery center)	8,137	8,252	8,749
Number of delivery	1,267	1,274	1,135

Key facts and figures

Results, and number of patients and personnel in past three years (FY2011)

Emergency center	Number of patients	38,245	31,879	30,820
	Number of tertiary emergency patients	1,443	1,357	1,247
	Number of ambulances	6,595	6,549	7,203
	Number of ambulances (daily average)	18	18	20
Number of personnel	Total	1,296.0	1,295.7	1,345.0
	Doctors	193.0	199.6	213.5
	Nurses	703.9	685.4	706.9
	Medical technologists, etc.	287.3	291.3	294.4
	Clerical workers	111.8	1119.4	130.2

Emergency Care System at JRC Musashino Hospital



Classification of Emergency Medical Facilities

- Tertiary Emergency Medical Facilities
(handling highest level emergency medical care)
 - Emergency and Critical Care Centers
- Secondary Emergency Medical Facilities
(handling comprehensive emergency medical care)
 - Emergency Hospitals
 - Specialized acute care hospitals and clinics
(stroke, acute myocardial infarction, etc.)
- Initial Emergency Medical Facilities
(handling initial emergency medical care)
 - Holiday/after-hours emergency centers & clinics, etc.

- **Establishment of Information Section**
- **Disaster Management Headquarter Office**
- **Disaster Management System**

Criteria of the establishment of Information Section

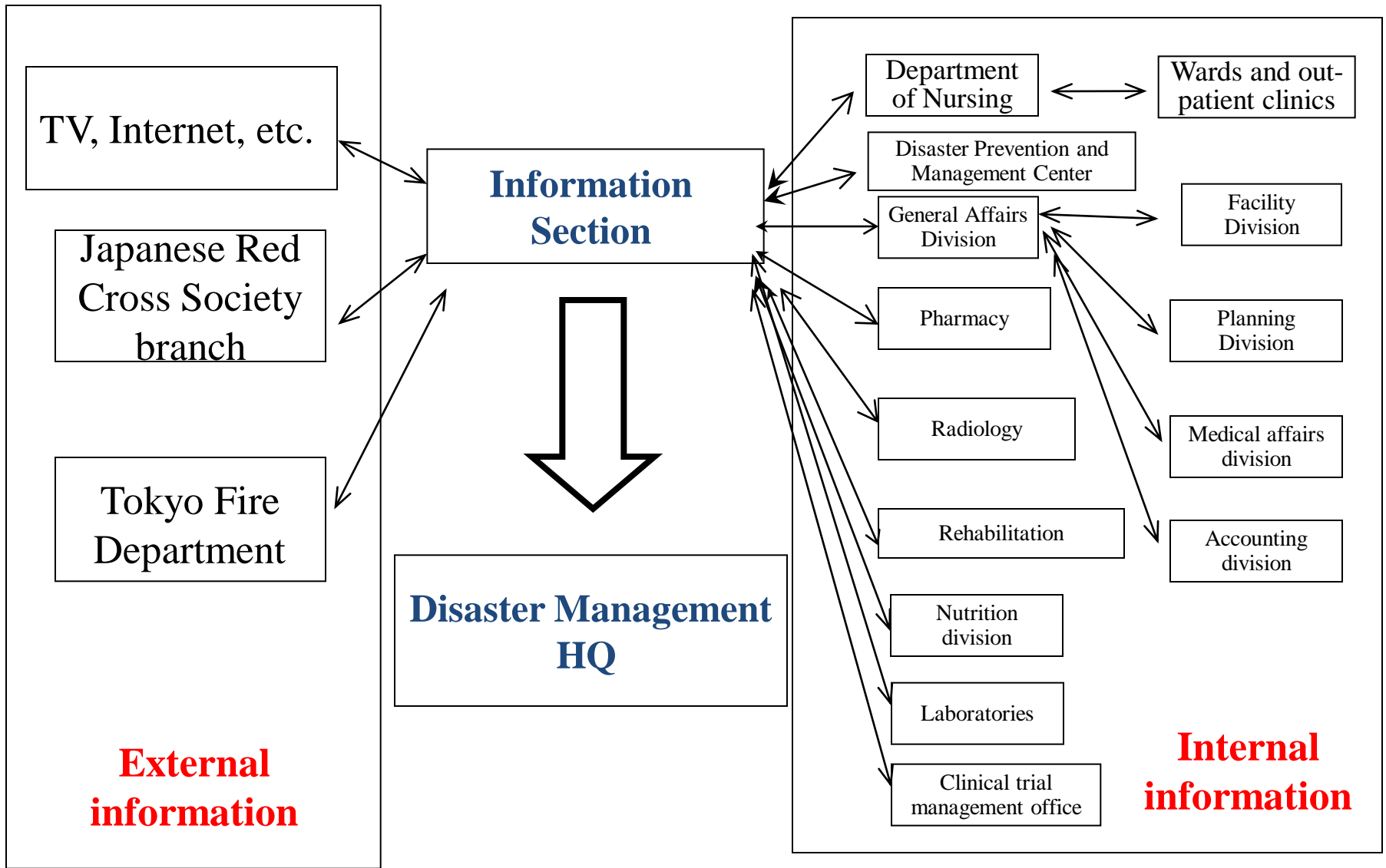
Disasters outside the hospital

- 1) Within the Tokyo Metropolis, an earthquake at JMA Seismic Intensity Scale 5 or greater occurs
- 2) In another region, an earthquake at JMA Seismic Intensity Scale 6 or greater occurs
- 3) Tsunami Warning (for a large tsunami) is issued
- 4) Tokai Earthquake Advisory is issued
- 5) A large scale rail or air accident occurs
- 6) A large scale disaster occurs in the Kanto region

Disasters inside of the hospital

- (Large) shaking is felt in the hospital ward.
- Fire (including when the fire alarm is set off)
- Lifelines are judged to get damaged by water leaks, power outages, or other incidents.

Respond with the “All hazards approach”



Where the intelligence unit is established will be determined according to the situation. Emergency center (1F), General affairs division (8F), Social division, sub-Disaster Prevention & Response Center, etc.

**Disaster
occurs**

External
information



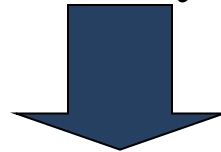
Information
Section



Internal
information

Internet
TV
Radio, etc.

- Damage and/or casualties within the hospital
 - Dispatch of disaster relief team
 - Acceptance of large number of injury patients
- Or a high possibility of any of these measures

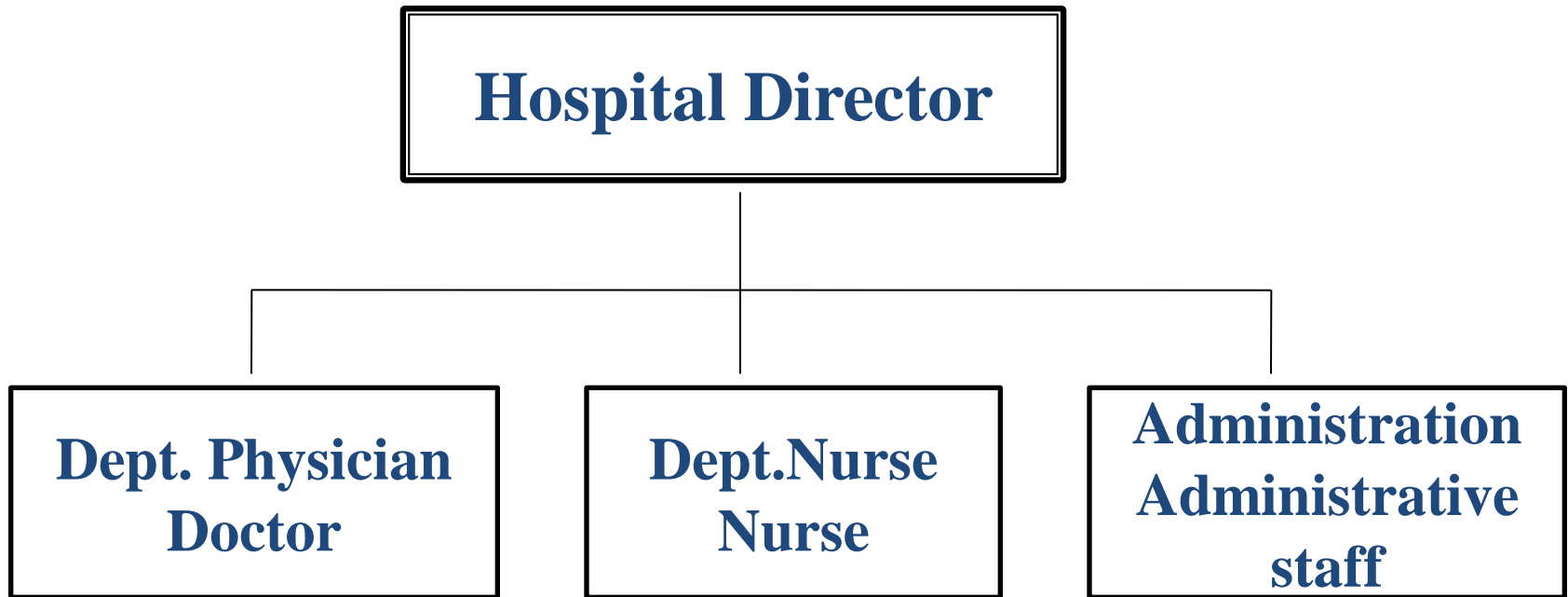


Disaster Management HQ

Primary activities at the JRC Musashino
when a disaster occurs

Preliminary action

towards the establishment of a Disaster Management HQ



Determine who is in charge in each area and establish a command hierarchy (Preliminary move towards the establishment of a disaster management HQ)

Plan for Receiving Injured Individuals During Disasters

Framework of Acceptance according to the disaster level

	Scale of the disaster	Venues for the response	Staff on duties for acceptance	Response
Level I	Local disaster Accident (up to 30 persons)	Emergency Center	Staff already at the hospital (Emergency department and support) Call in staff if on a weekend or at night	Emergency response
Level II	Local natural disaster Large scale manmade disaster Infrastructure intact (30 – 100 persons)	Emergency Center and Atrium	Staff that are able to support (Emergency department and support from each department) Call in staff if on a weekend or at night Senior staff to come in	Extended response
Level III	Natural disaster that damaged the infrastructure (over 100 persons)	Emergency Center, Atrium and Outpatient wing	All staff to be called in Request assistance to the branches	State of emergency (maximum) response

Adopt a different response framework according to the number of injured patients (expected) to arrive

Expansion according to the disaster level

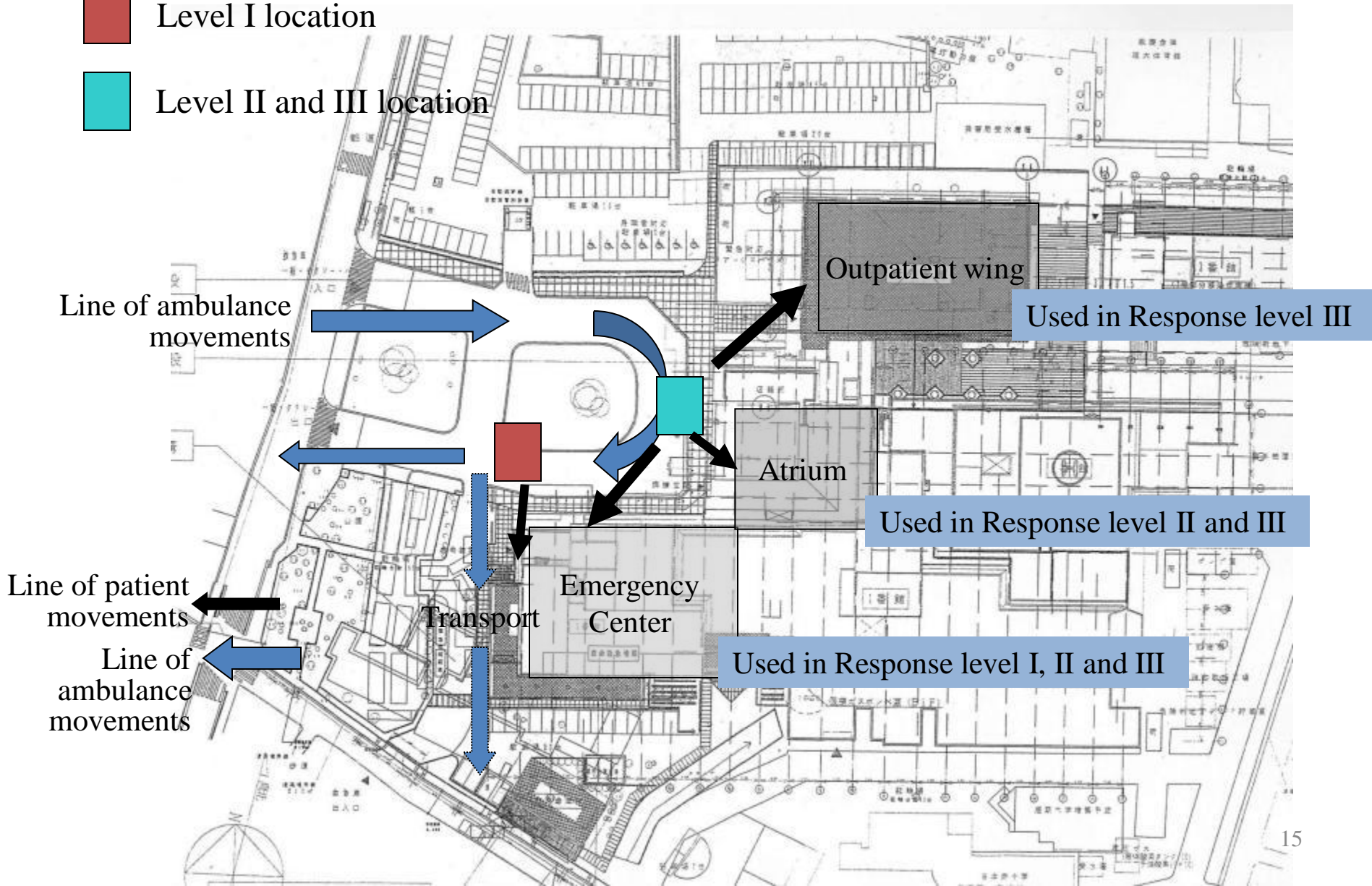
Shifting of the triage post at each level



Level I location



Level II and III location



Great East Japan Earthquake



- Quake intensity registered at 5-lower in Musashino City
- Felt the severe shock of the earthquake on the 8th floor of our hospital

March 11, 2011

Information Gathering Section



Establishment of Disaster
Management HQ

Key Factors for Systematic Response for Large-Scale Accidents and Disasters

C: C ommand & C ontrol	指揮と統制	Medical Management (医療管理) Forming Organization
S: S afety	安全	
C: C ommunication	情報伝達	
A: A ssessment	評価	

Establish CSCA to start TTT

T: T riage	トリアージ	Medical Support (医療支援)
T: T reatment	治療	
T: T ransport	搬送	

3T



Preparation for mobilization to disaster sites March 11, 2011

A. KATSUMI Musashino Red Cross Hospital



Mobilization to disaster sites, Seeing the staff off in front of the hospital, “Take care!”
March 11, 2011, 6:00 PM

A. KATSUMI Musashino Red Cross Hospital

JRC Musashino Hospital Disaster Relief Team At the Great East Japan Earthquake

A total of 17 teams were dispatched between March 11 and July 4, 2011



Disaster Relief Medical Care Stations

Medical care Stations (MCS) installed in the areas that have no such facilities.

- Disaster Relief Medical Care Stations (MCS) at
evacuation centers
disaster sites
hospitals
- Core Disaster Relief MCS within disaster sites
(Kamaishi, Rikuzen-Takata, etc.)



Disaster Relief Medical Care Stations in front of a hospital

March 15, JRC Ishinomaki Hospital

A. KATSUMI Musashino Red Cross Hospital

Disaster Relief MCS



In front of Miyagi Prefectural Office DERU

Disaster Relief MCS
at evacuation centers



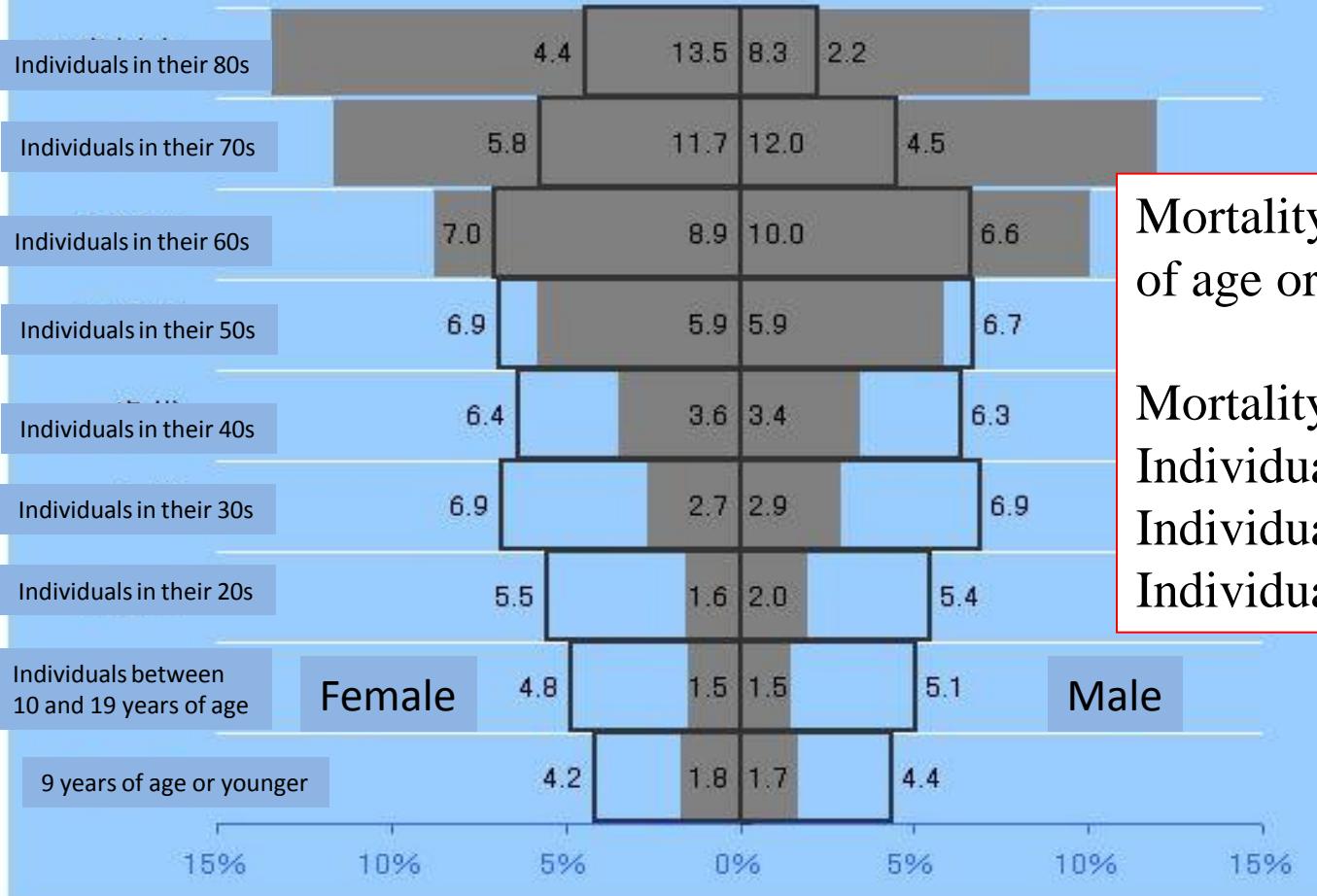
Suzuko Park in Kamaishi City

Core Disaster Relief MCS

Early installation of MCS is an important strategy for mid- and long-term medical care activities

Mortality by age and population in the Great East Japan Earthquake

■ Composition of earthquake fatalities (excluding the individuals whose sex and age are unknown) □ Composition of populations in coastal cities, towns and villages in 3 prefectures in the Tohoku region



Mortality of individuals 60 years of age or older 64.4%

Mortality by age/ by population

- Individuals in their 80s 3.3 times
- Individuals in their 70s 2.3 times
- Individuals in their 60s 1.4 times

Figures indicate the composition ratios (100%) setting the male-to-female ratio at 100.
 Number of deaths in the Great East Japan Earthquake is the total in three prefectures in Tohoku Region (Iwate, Miyagi, Fukushima) created by the Cabinet Office based on the data released from the National Policy Agency.
 Data is acquired after autopsy (excluding the individuals whose sex and age are unknown) (as of April 11, 2011).
 Demographic composition in the coastal areas in three prefectures in Tohoku Region is acquired from 2010 Census.



Many people were waiting for us anxiously March 16, 2011



Contact with children gave us energy. (March 16, 2011)

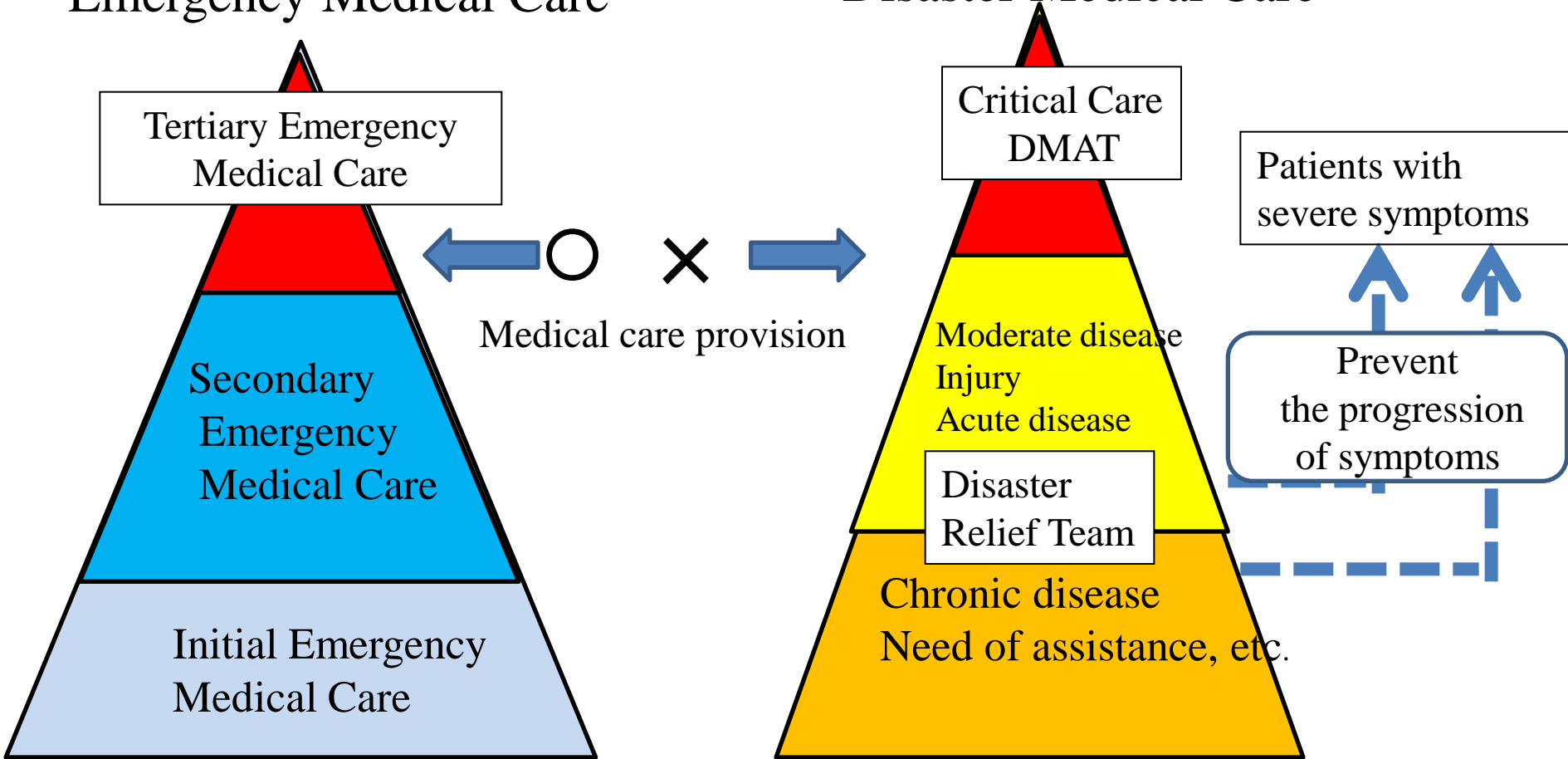
Help people invigorated us.

A. KATSUMI Musashino Red Cross
Hospital

Medical Support in Acute Disaster

Emergency Medical Care

Disaster Medical Care



It is important to promptly provide assistance to individuals in need, not only in terms of medical care, but also for other matters at disaster sites where the provision of medical care is difficult in the long run.

vulnerable people during disaster

vulnerable people during disaster (those who fall into (1) to (4) below.)

When danger is close at hand,

(1) Those who cannot sense it, or have difficulty in sensing it;

(2) Those who cannot take or have difficulty in taking appropriate action even if they can sense it;

(3) Those who cannot receive or have difficulty in receiving information on risk; and

(4) Those who receive information on risk, but cannot take or have difficulty in taking appropriate action.

1991 White Paper on Disaster Management

vulnerable people and disaster

Injured individuals ← Providing medical care

Individuals with disabilities

Elderly individuals

Infants & children

Individuals from abroad

Pregnant women

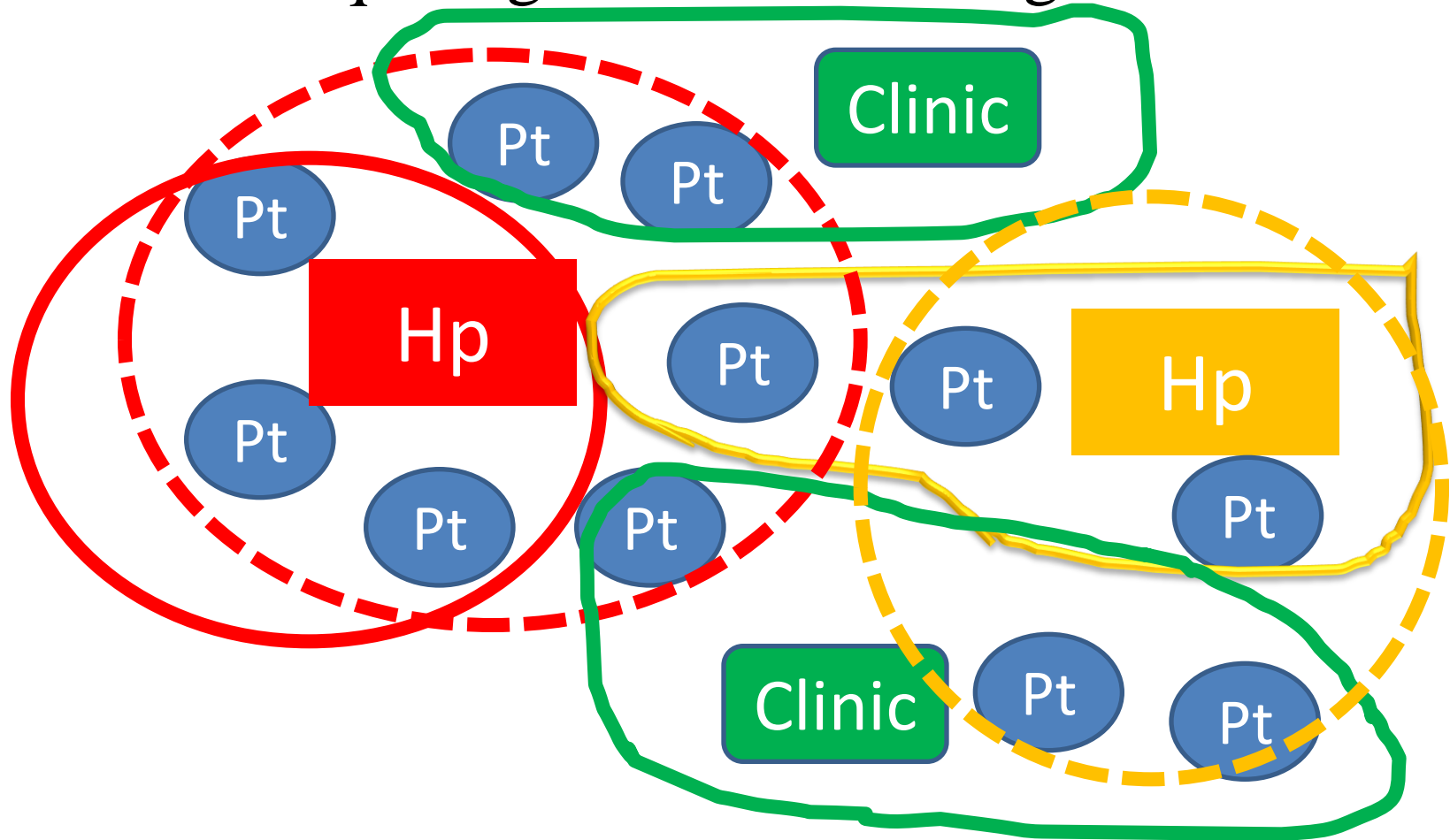
Travelers

vulnerable people requiring prompt medical care

Individuals with pre-existing conditions whose life would be at risk if medical care were interrupted include the following:

- Those who use artificial respirators at home;
- Those who use oxygen tanks at home; and
- Those who receive dialysis treatment.

Difficulties for individuals requiring assistance in large cities



Individual hospitals, clinics, home-visit-care or nursing-care facilities maintain patient information.

No information sharing under normal circumstances.

→ Causing difficulty in prompt role-sharing during disaster.

What is essential for a local base hospital

- Improvement of emergency medical care facilities during normal times is necessary to prepare for the prompt switch to disaster medical care.
- Education for practical team medicine during disaster in preparation for prompt and long-term disaster medical care
- Cooperation with administrations, health centers, and medical associations for the sharing of information to respond to individuals requiring assistance during disaster