

address this issue, a collaboration of public and non-profit partners worked with the Belize National Fire Service to implement the country's first formal prehospital emergency medical service using novel communications technologies. With new resources and vehicles already donated to the fire service, the collaboration focused specifically on the communications component of the response system, specifically to improve the handling of incoming requests for emergency assistance from the public, as well as to improve the process of dispatching prehospital personnel using readily-available mobile technologies.

**Method:** Working with the Belize National Fire Service, program partners implemented the country's first emergency communications center, trained new dispatchers, field-tested the dispatch technology through intensive training sessions, and launched the system in the capital district of Cayo.

**Results:** Launched in June 2022, the program has thus far achieved the following outcomes:

- Active Dispatchers: 26
- Active Responders: 104
- Emergencies Dispatched: 156
- Average Scene Response Time: 7m45s

**Conclusion:** Over the past year, partner NGOs Trek Medics and Empact Northwest have worked collaboratively to implement a first-ever centralized emergency dispatch system for the Belize National Fire Service, using a novel cloud-based dispatch software running on readily-available mobile phones and mobile. In addition to drastic improvements in response performance, satisfaction among system managers and response personnel is high, with plans currently underway to scale the program nationally.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s85–s86  
doi:10.1017/S1049023X23002455

### Considering the Use of Mobile Medical Containers in the Event of Natural Disasters

Keiji Nakata PhD<sup>1</sup>, Kiyokazu Maebayashi PhD<sup>1</sup>,  
Shuji Tokumaru<sup>2</sup>

1. Kobegakuin University, Kobe, Japan
2. Mobile Medical Container Promotion Council, Chiyoda, Japan

**Introduction:** In recent years, Japan has been hit by a number of natural disasters including the Great East Japan Earthquake, the Kumamoto Earthquake, the heavy rains in western Japan, and the heavy rains in Kumamoto to name a few. In each of these events, a number of hospitals located within the disaster areas were damaged and ceased to function, leading to difficulties in providing regional medical care. This presentation examines the effectiveness of mobile medical containers in handling such situations in the future.

**Method:** This study organizes lessons learned from past disasters as well as the merits of and challenges facing current mobile medical containers while looking into the future.

**Results:** When the Great East Japan Earthquake occurred, assembly-and-installation type temporary health clinics were constructed, but due to the numerous Japanese laws and

regulations, it took almost three months for these to be delivered. On the other hand, current mobile medical containers are already in use in countries such as Tonga and Senegal and have the following advantages: (1) High mobility and easy installation, (2) Expandability as necessary, and (3) Durability for long-term use.

**Conclusion:** Despite challenges such as clarification of legal handling, electricity, water supply and drainage, we consider mobile medical containers to be effective alternative medical facilities in the event of disasters.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s86  
doi:10.1017/S1049023X23002467

### Flexible Composable Health IT Platforms for Emergency Response

Yalini Senathirajah PhD

University of Pittsburgh, Pittsburgh, USA

**Introduction:** Health information technology, especially electronic health records (EHRs) pose difficult design problems due to the data and workflow complexity, high-stakes stressful nature of healthcare work, variability of information and collaboration needs and stakeholders. Emergency response poses further requirements. We propose a different, novel approach in which flexible 'building block' platforms composable by non-programmers could address rapid implementation and sharing of new functionality as needed at the point of care. In order to truly meet unpredicted emergency needs a philosophy of maximal flexibility and data comprehensiveness is required.

**Method:** Existing technologies were used in new ways to permit prototype design of composable health IT platforms, intended to be added to existing health information systems, allowing nonprogrammers (including clinician end users) to assemble any desired data, visualization, and new logic to permit rapid tool deployment in emergencies. An example is the rapid composition of Covid-19 screening and treatment tools (in minutes) for fast implementation of new screening and care guidelines (as happens in a new epidemic), with usable visualization and decision tools.

**Results:** Prototype systems were successfully built and configured for rapid tool creation for pandemic-specific needs including setup of automated screening and decision tools using EHR data plus point of care data gathering. These will be demonstrated. A modular, composable approach is usable by non-programmer clinicians, permitting those most familiar with rapidly changing clinical needs and guidelines to implement new health IT functionality directly instead of incurring delays typical when IT staff must do ad hoc programming. At this time new initiatives and mandates for health IT interoperability make this more easily doable than previously.

**Conclusion:** Disaster response may be facilitated by a different approach to health IT design and use, with advantages for rapid response, streamlining clinician work, and ease of use.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s86  
doi:10.1017/S1049023X23002479