On the COVER

A Public Health Tool for Population Resilience

Bidisha Sinha, MPH

On April 25, 2012, the American Medical Association, in partnership with the Southwest Texas Regional Advisory Council (STRAC), conducted a simulation exercise to demonstrate the usability and efficacy of a public health tool that allows health responders to securely identify and assess displaced individuals in a timely manner during a disaster. This public health tool, in the form of a "smart card," was developed under a translational research grant from the Centers for Disease Control and Prevention and borrowed from the many lessons learned from Hurricane Katrina and its devastating aftermath. One lesson in particular that shaped the construct of this device is that a large number of people can become suddenly displaced during a disaster and not have pertinent information such as their medications, allergies, or emergency contact information available. In addition, many people, especially those who could not speak English, were otherwise incapable of speech, or were not cognizant, could not communicate their primary ailment or identify themselves. The advent of smart card technology in eHealth gives us the ability to link advances from the medical, public health, and information technology fields to develop a public health tool that can securely carry essential health and identification information and be useful not only during disasters but also for everyday emergencies.

The cover photo illustrates the simulation exercise, which took place in the Alamo dome in San Antonio, Texas. In particular, this photo highlights the demonstration in which teams of actual emergency medical technician responders triaged 20 simulated, acute care patients (played by student nurses) and assigned them to 1 of 4 public health triage destinations (emergency department [ED], medical shelter, general shelter, or nursing home). In the first scenario, the simulated casualties had limited medical cards/credentials. In the duplicate scenario the "patients" carried a secure health information card (SHIC) containing critical health and contact information. The responders also had personal identity verification interoperable (PIV-I) credential smart cards that allowed them to read the SHIC information on their handheld devices. The most notable measured findings were a decrease in overall patient encounter time of more than 20% and a decrease in ED/hospital dispositions from 6 to 1 for the group using the card. In addition, the pseudopatients reported a significant improvement in both quality and timeliness of care. While such a simulation exercise cannot convey statistical significance and may not "prove" logistical feasibility in the field, it most certainly demonstrates the utility of having fast, easy, and reliable access to accurate and essential health information in the aftermath of an emergency or disaster. It further contributes conceptual support for the integration of health technologies such as PIV-I credentialing and individually-owned smart cards into our disaster planning efforts.

https://doi.org/10.1001/dmp.2012.52 Published online by Cambridge University Press