



Putting SMART to the Test – Weathering Climate Change in the Caribbean

The New Peebles Hospital, which was inaugurated in December 2014 in the British Virgin Islands, is one of the first hospitals, transformed to smart standards in the region of the Caribbean, that has already been put to the test. The new facilities were ranked “A” according to the Safety Index Calculator, which is utilized to determine a hospital’s degree of resilience to natural disasters – the highest level that can be obtained. And when hurricanes Irma and Maria arrived last year to do their own testing, the hospital passed with flying colors.

“The only visible impact on the new hospital were fractures to the outer window panels, which were probably caused by strong winds or by flying objects hitting the windows,” said Sharleen DaBreo, Director of the Department of Disaster Management of the British Virgin Islands. “The hospital itself never lost its operating capacity,” she added.

In fact, the hospital held up so well during the hurricanes that not only did it accommodate the National Emergency Operations Center during the disaster, but when government buildings were severely damaged or destroyed under the strong winds, it was also utilized to host meetings of the Cabinet and office accommodations for the Ministry of Health and Social Development.

Following the hurricanes, the British Virgin Islands’ Ministry of Health and Social Development was convinced of the effectiveness of the smart hospital concept, so when it became clear that urgent refurbishments to the Adina Donovan Home for the Elderly and the Virgin Gorda Home for the Elderly were required following the hurricane, the Ministry worked with PAHO to reconstruct them according to smart standards.

“The project for the elderly facilities was vital in helping the overall community recover during the post-hurricane period too,” said DaBreo. Throughout the Project, PAHO and the Ministry of Health worked exclusively with local companies and local contractors to ensure that they were also provided with an opportunity to get back up and running after the hurricane. The community was invited to participate, with local businesses donating towards the upkeep of the buildings and local residents getting involved in other projects to contribute to the overall rebuilding of the facilities.

“Applying the smart concept during disaster recovery is about more than just fixing a structure. It’s about fixing its functionality and making sure that residents, staff and the community are better off too,” said DaBreo.

As small island states in the Caribbean become increasingly vulnerable to the effects of climate change, it is vital that health facilities in the region, that are located in areas of high risk, are strengthened in the face of repeated damage and growth in climate threats.

Smart Hospitals are being developed in Belize, Dominica, Guyana, Jamaica and Saint Lucia, and facilities have already been constructed in Saint Vincent and the Grenadines, and Grenada.

These facilities are not only designed to withstand extreme weather events that may occur, but with energy prices in the Caribbean among the highest in the world, the savings made by the hospitals can also be utilized to improve services and support the maintenance and upkeep needs going forward.

“Smart doesn’t just refer to smart construction and smart energy consumption, but also to smart investment,” said Dr. Dana Van Alphen, PAHO’s Senior Advisor in Disaster Preparedness and Response.

Initiatives such as Smart Hospitals are among the topics to be discussed during the III Global Conference on Health and Climate Change: Special Focus on Small Island Developing States (SIDS) next week in St George’s, Grenada. Ministers of Health from all over the Caribbean will convene on the 16-18 October to look at ways to ensure that health systems in the region can be made resilient to climate variability and change.

The future is Smart

With hurricane season in the Caribbean now well underway, and many countries still rebuilding following hurricanes Irma and Maria in August and September last year, islands are increasingly turning to the Smart hospital concept as a way of fortifying not just national health facilities but other critical structures such as schools against the impact of climate change-related disasters.

Natural hazards such as hurricanes, earthquakes, floods and storm surges can all cause significant disruption to health services as well as huge economic losses. In the Region of the Americas, 77% of hospitals are located in areas that are susceptible to disasters, leaving populations vulnerable when health facilities are unable to provide care to victims during and after an extreme event.

“The Smart hospital initiative aims to improve the resilience of health care facilities, strengthening their structure and operational capacity, while also reducing their reliance on non-renewable energy sources by making them more green,” says Dr. Van Alphen.

The Project, financed by the UK’s Department for International Development (DFID) and implemented through the Pan American health Organization (PAHO), works with Ministries, of Health in countries across the Eastern Caribbean to construct and/or retrofit health facilities with the aim of improving disaster resilience while saving energy and water.

The primary functions of smart healthcare facilities include protecting the lives of patients and healthcare workers; reducing damage to hospital equipment and infrastructure; providing health services under emergency conditions; using scarce resources more efficiently; and improving strategies to adjust to future hazards and climate change.

The aim of the Smart project is to ensure that by 2020, around 50 hospitals and health facilities will be transformed to be safer and more environmentally friendly under this initiative.

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