

'Smart' Hospitals are safe, green & sustainable

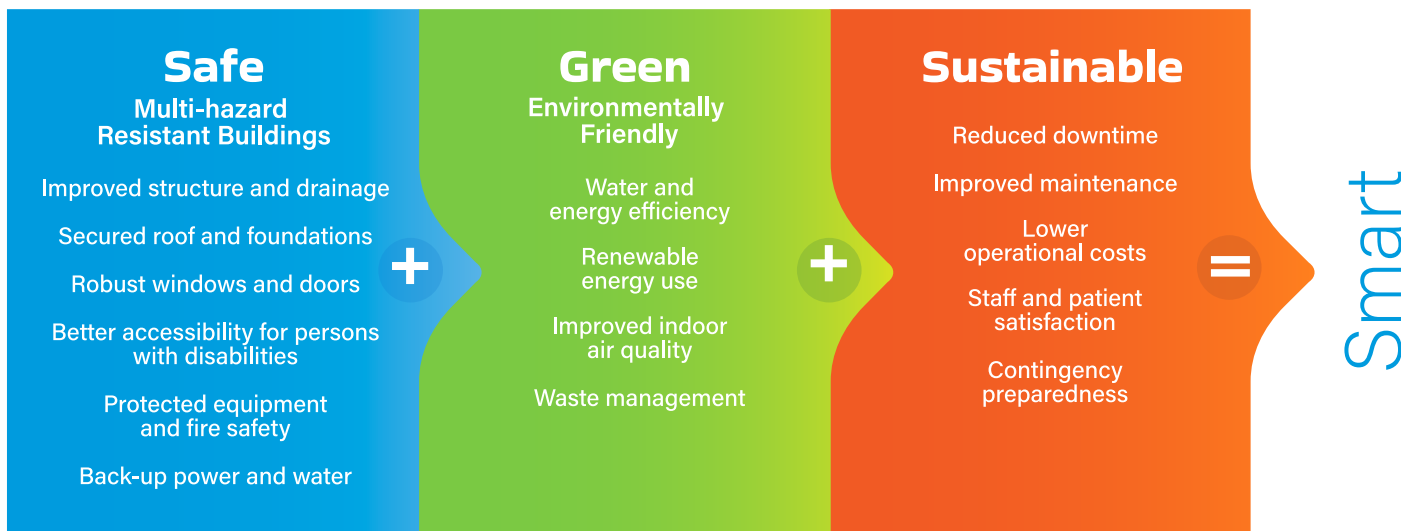
Accelerating the adoption of the 'Smart' standards for health infrastructure resilience.

The 'Smart' Hospitals initiative provides a blueprint to improve the resilience of critical health infrastructure to multiple hazards and the use of green technologies, allowing uninterrupted care, during and after emergencies and disasters.



As part of the process, a 'Smart' gold standard (A70) is used as a benchmark safety rating based on the Hospital Safety Index (HSI) assessment that ensures the safety of staff and patients and score of at least 70% using the greening checklist produced for the Caribbean which is based on leading global green building standards.

What are we talking about?



The initiative has been **successfully implemented and tested** in 7 countries/ 70 sites in the Caribbean. Many countries are rolling out the 'SMART' standards across their facility network and using the standards for new buildings too.

Health facilities brought up to a 'Smart' gold standard passed the test by continuing to provide vital services during recent emergencies and disasters, including:

- Hurricanes Irma and Maria in 2017 in British Virgin Islands.
- Hurricane Lisa in 2021 in Belize.
- Volcanic eruption and COVID-19 in Saint Vincent and the Grenadines in 2021.
- 5.4M Earthquake in Jamaica in October 2023.

"We feel safer during disasters because of the (windows) shutters. We don't have to worry about light and water. If patients comes during a disaster, we know we can take care of them."

Jennifer Matute – Nurse Supervisor
San Ignacio Community Hospital, Belize

Case Study Santa Cruz Smart Health Centre, Jamaica



Improvements:

- Improved accessibility for persons with disabilities
- Increased water storage and rainwater harvesting
- Solar water heater
- New roof waterproofing
- Increased fuel storage
- Strengthened roof
- Solar panels
- Backup power
- Hurricane rated windows and doors
- Raised walkways against flooding

Before and After Chateaubelair 'Smart' Hospital, St. Vincent and the Grenadines



The Chateaubelair 'Smart' Hospital in St. Vincent and the Grenadines continued responding to the COVID-19 pandemic during and after the volcanic eruption in 2021.

'Smart' gold standard implementation helps save lives, protect people, infrastructures, and investment, and ensures health facilities are better able to cope with risks they face now and into the future.

Cost effectiveness

Sites retrofitted to 'Smart' gold standard have seen between **30%-60% in operational cost savings**.

Interventions made on 'Smart' facilities allow them to save costs by streamlining water and energy usage, and through service and structure improvements. **Energy improvements are the major driver of savings and positive return on investment.** Disaster risk reduction inclusion and strong maintenance regimes from the outset are most cost effective.

Average costs

The cost of 'Smart' retrofitting depends on the size and level of complexity of a health facility. In the Caribbean, the average cost to reach A70 standard in medium sized facilities ranges from US\$660k-2.1M.

The 'Smart' Hospitals initiative has been carried out in 7 Caribbean countries through a partnership between national governments, PAHO/WHO, and UK FCDO.

How to upgrade a centre to a 'Smart' health facility?

Check out the 'Smart' Toolkit which guides you through the **full process in 3 steps**.



SCAN ME!

Scan the code to access the 'Smart' Toolkit

For more information, visit:
www.paho.org/smart-hospitals

