





Figure 1. Resilience framework (Cimellaro, 2010).

The model has been applied to a network of hospitals. The resilience framework can be used as a decision support tool to increase the resilience index of systems, such as health care facilities, and reduce disaster vulnerability and consequences.

## REFERENCES

- Bruneau, M., Chang, S.E., Eguchi, R.T., Lee, G.C., O'Rourke, T. D., Reinhorn, A.M., Shinozuka, M., Tierney, K., Wallace, W.A., and Von Winterfeldt, D. (2003). A framework to quantitatively assess and enhance the seismic resilience of communities. *Earthquake Spectra*, 19(4), 733-752.
- Cimellaro, G.P., Reinhorn, A.M., and Bruneau, M. (2010). Seismic resilience of a hospital system. *Structure and Infrastructure Engineering*, 6(1-2), 127-144.
- Cimellaro, G.P., Malavisi, M., and Mahin, S. (2017). Using discrete event simulation models to evaluate resilience of an emergency department. *Journal of Earthquake Engineering*, 21(2), 203-226.
- United Nations International Strategy for Disaster Reduction (UNISDR) (2009). *Terminology on Disaster Risk Reduction*.
- World Health Organization (2015). *Hospital Safety Index: Guide for Evaluators*.