Milken Institute School of Public Health Statement on New Study to Estimate Excess Mortality in Puerto Rico Tied to Hurricane Maria

WASHINGTON, DC (May 30, 2018)—The Milken Institute School of Public Health at the George Washington University (Milken Institute SPH) issued the following statement about Harvard University’s study published Tuesday in the New England Journal of Medicine on mortality in Puerto Rico tied to Hurricane Maria:

The study led by Harvard researchers on the deaths tied to Hurricane Maria is a welcome addition to the scientific literature on the impact of the hurricane in Puerto Rico. The Harvard study used methods that are commonly used following disasters where there are few or no official records of death.

The study is based on estimates from household surveys and not on actual records of death. In that way, the Harvard study is fundamentally different from the Milken Institute SPH study commissioned by the Government of Puerto Rico.

The household survey method used by Harvard researchers in Puerto Rico gives a wide estimate of the deaths tied to Hurricane Maria. Given the design of the household survey in the reality of a difficult post-disaster environment, it is appropriate that the researchers reported the deaths with wide intervals that convey the range of uncertainty. The estimate of 4600 excess deaths reported in the popular press falls within a range of uncertainty, and that means that the number could be lower or higher than that (referred to by scientists as a 95 percent confidence interval). The study further provides insight into the circumstances surrounding deaths and the emergency context in which people were living — both will inform future research and interventions.

The epidemiological study being conducted by researchers at Milken Institute SPH will use actual data about deaths – death certificate and other mortality data from September 2017 to the end of February 2018 – in order to estimate the excess deaths related to Hurricane Maria. Estimating deaths using such mortality data is a time-consuming and difficult task, one that has rarely been done after a disaster of this magnitude. In the context of the health care and death registration systems of Puerto Rico, it is a more accurate way to assess mortality. In addition, the study will evaluate the death
certification process to understand how this process was implemented under normal conditions and how the process was affected in the aftermath of the hurricane. Finally, the Milken Institute SPH team is also assessing the Puerto Rican government's communications with the public regarding the storm.

The Milken Institute SPH study is expected to provide a narrower range of uncertainty around the estimated excess deaths tied to Hurricane Maria. It will also offer recommendations that will help the government of Puerto Rico prepare for future natural disasters.

The Milken Institute SPH study was slated to be finished by the end of May; however, collection of the data has taken longer than expected. A final report for the Phase I of the two-part study is expected out this summer.