A105 Infrastructure, Organization, and Challenges of the Puerto Rico Medical Examiner System

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Learning Overview: The goals of this presentation are: (1) to describe the current structure and organization of the Puerto Rico Medical Examiner System, (2) to identify challenges in the system and their sources, and (3) to understand the impact of the suggested and implemented solutions for challenges encountered.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by demonstrating how all health systems can be impacted by natural disasters. In the case of Hurricane Maria in Puerto Rico, unmasked ongoing challenges in the medical examiner system that provide an excellent learning opportunity for other health systems are at risk for natural disaster.

The American Society of Clinical Pathology (ASCP), with several supporting and organizing groups, traveled to Puerto Rico on a humanitarian aid mission specifically focused on the challenges of forensic pathology in Puerto Rico. Although Hurricane Maria's path of destruction across Puerto Rico in 2017 caused major headlines for the Puerto Rico Medical Examiner System, the underlying challenges faced by the pathologists and laboratory professionals in Puerto Rico were simply unmasked and not caused by this event. The immediate deaths (direct) caused as a direct result of the hurricane required examination by the Medical Examiners (MEs) and spiked their caseload temporarily. Due to ongoing challenges across the island, additional deaths (indirect) as a result of the hurricane created controversy and challenges as attempts to measure the overall death toll became both subjectively and objectively difficult.

As is seen in many laboratories around the world and in mainland United States, staffing shortages, inefficient external processes, and resource challenges created a "perfect storm" for the ME system to come under fire. Forensic pathologists, those responsible for ascertaining medicolegal deaths, are in short supply nationally, with a significant gap in numbers of pathologists and funding for their services. Puerto Rico, likewise, has a staffing shortage that was quantified and projected by the assessment team. Like the mainland United States, the forensic services of Puerto Rico are a government-funded program and, therefore, the operations are depending on approved budgets, transparency in costing and resource allocation, and matching need with supply for all aspects of the laboratory's function. The leadership of the ME's office has made incredible strides and had documented successes in improving the funding challenges for the laboratory and continue to build out the needed resources.

With the presence of Hurricane Maria, continuous access to power, for example, became a major challenge as refrigeration is a key component of ME functionality, as well as mortuary services throughout the island. The need for temporary storage admixed with communication challenges created disinformation in the public sector. However, the core team, facilities, and processes are clearly prepared to be successful and a series of not-mutually-exclusive solutions are available to propel this system to excellence. In 2014, the ME laboratory was able to obtain the National Association of Medical Examiners (NAME) accreditation. In 2019, NAME extended provisional accreditation for the ME office, yet gaps to meeting the accreditation requirements continue and stem directly from the above challenges and not from a change in the core functionality. However, those gaps, are identifiable and amenable to sustainable changes. The experience of assessing this system, integration and modeling of data, and the presentation of solutions will be discussed.

Hurricane, Personnel Capacity, Assessment

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