

Global Health Elective Profile: Dr. David Murphy; Dominican Republic



Dr. David Murphy is currently a fellow in the UWashEMS Fellowship. Prior to fellowship, Dr. Murphy completed the Population Health Certificate as a fourth-year resident. Dr. Murphy traveled to the Dominican Republic for his Global Health Elective to teach and provide care to the underserved. He spent time in the ED at Hospital General de la Plaza de la Salud in Santo Domingo.

Hospital General de la Plaza de la Salud has 30 beds and sees 58,000 patients per year, with an admission rate of 20% among adult population; the residency at Plaza de la Salud is a 4-year program and has graduated 11 classes to date.

Dr. Murphy brought (on loan) a portable, tablet-based Phillips Lumify machine with the purpose of teaching bedside ED echocardiography. Currently there is not a working machine in the department (being repaired), and imaging diagnostics in the ED are limited to plain films, non-contrast head CT, and formal diagnostic ultrasound studies. Dr. Murphy taught bedside ED echocardiography to the residents and they performed over one hundred studies; discovering, solidifying, or discarding etiologies for patients presenting complaints. Several notable cases include an unstable ruptured AAA, thoracic aortic dissection, and a case of acute urinary retention in a non-verbal CP patient with pyelonephritis.

To complete his rotation, Dr. Murphy prepared and delivered two lectures (*Use of bedside ultrasonography in undifferentiated shock patients*, and *Emerging airway management techniques and use of airway checklist*) targeting his observations at the Plaza de Salud ED.

During the course of the elective, Dr. Murphy visited the nascent 9-1-1 EMS system headquarters in Santo Domingo and traveled to three other hospitals in the region (including one of the trauma centers) to meet and work with ED physicians in disparate conditions with limited resources.

Similar to our system, there is a tiered response with a few interesting adaptations: **1)** Physicians receive calls at the dispatch center and determine the appropriate level of response for each medical call. **2)** There are no advanced practice paramedics, rather EMTs, RNs, and MDs, the latter two paired in as advanced prehospital units. **3)** To offset the massive traffic jams, motorcycle units are employed as advance units ahead of ambulance arrival which, when equipped with AEDs, may be a lifesaving difference.

Dr. Murphy summed up his elective with this: "It has been humbling and encouraging being here and witnessing the state of Emergency Medicine in the DR. Without a doubt, spending time with patients and sharing/interpreting their ultrasound images has been particularly rewarding, only rivaled by the personal and professional friendships I have cultivated during my elective rotation." **(See next pages for photos)**





Compared to what is offered in the US, there are several diagnostic (e.g. CT/MRI) and treatment (e.g. stroke care) limitations. However, one area of opportunity is bedside ultrasound. Here, Dr. Murphy is teaching ED echocardiography.



Here, Dr. Murphy is delivering a lecture. In response to the airway checklist lecture, departmental leadership will adapt/implement our own Harborview Medical Center Airway Checklist for tracheal intubation.





Here, Dr. Murphy is teaching a resident how to use the tablet-based Phillips Lumify machine with the purpose of teaching bedside ED echocardiography.



Dr. Murphy with the residents at Hospital General de la Plaza de la Salud in Santo Domingo

