The R.E.A.C.T (Resuscitation Education AED and CPR Training) Program at Columbia University, New York

**BRIEF BACKGROUND**

Ambulatory sites nationwide depend on the 911 system for managing acute cardiac conditions, and require staff and health care providers to assume the role of first responders and maintain blood flow to the brain via immediate CPR and AED administration. Ambulatory sites affiliated with Columbia Doctors — the physician practice group of Columbia University Medical Center — see more than a million patients per year and have no access to code teams or Advanced Cardiovascular Life Support-trained individuals. They identified the need for a formal campaign (R.E.A.C.T) through which clinical and non-clinical staff could be educated and trained on hands-only cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) administration. The goal of this initiative was to empower sites via training and relieve bystanders of their anxiety and post-traumatic stress, well known to occur after CPR administration. The education was also intended to dispel some of the myths associated with CPR.

**STEPS TAKEN**

The Patient Safety department, partnering with American Heart Association, conducted scheduled training sessions for the Columbia Doctors staff on how to identify an individual suffering from cardiac arrest, how to perform CPR and use an AED — all while waiting for emergency medical services to arrive to the scene. The training session included a presentation on survivors’ stories, statistics on the epidemic, and hands-on simulation training using adult and infant CPR Anytime manikins and an AED trainer.

**CHALLENGES**

A questionnaire completed by participants revealed some of the barriers and concerns staff experienced regarding CPR and AED administration. The greatest long-term challenge was to optimally utilize this critical information and tailor appropriate interventions in the future.
RESULTS

Since the launch of the program in October 2018, Patient Safety reached its goal of training more than 80% of staff members at a majority of its ambulatory sites. The program provided core skills of CPR to 277 staff and 1,250 individuals in the community, by extension, with the help of the kits provided. Thus, more than 1,500 people were CPR and AED trained in the first six months. In addition, the department rolled out its Phase 2 component in May 2019, and trained 34 community health workers (CHW) affiliated with the Institute for Training Outreach and Community Health (InTOuCH) at Columbia University.

Each CHW is responsible for the overall health of 20-30 low-income families in Harlem and Washington Heights, New York. Upon taking the course, CHWs expressed enthusiasm and addressed their prior concerns of feeling unprepared or unqualified in the face of an emergency. Those concerns were diminished or greatly reduced after the 30-minute course. Though the subjective impact is deep, the team is collecting objective data to estimate the efficacy and learn effective strategies for dissemination and implementation.

OUTLOOK

Phase 2 of the program continues to make progress as more CHWs are trained. In partnership with the cardiac arrest and rapid response committee at New York Presbyterian Hospital’s Columbia and Weill-Cornell campuses, Patient Safety will proceed with Phase 3 of the initiative, training patients and family members with high-risk conditions like cardiac arrest and severe heart failure before hospital discharge.

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