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## Mexico City – Data Collection

# Tracking the Results of a “Cardio Protection” Program in Querétaro, Mexico

## BRIEF BACKGROUND

Since 2006, out-of-hospital cardiac arrests have been identified as a major healthcare problem in the capital city of Querétaro in the state of Querétaro, Mexico. Compounding the issue, there were only partial registries tracking out-of-hospital cardiac arrest cases.

## STEPS TAKEN

During 2009-2012, several hands-only CPR courses were given in the community, and by 2011, advanced pre-hospital care was also being provided. Ambulance crews were closely supervised and feedback was provided regarding response times. From September-December 2017, the municipality added 180 AEDs, certified 100 police officers in CPR/AED use and trained 911 dispatchers in telephone-assisted CPR.

In 2017, the city of Queretaro ran a “cardio-protection” program to certify police officers and train telephone dispatchers. The municipality certified 100 police officers on CPR/AED use, trained 911 dispatchers in telephone-assisted CPR and added 180 AEDs. Additionally, 5,000 laypersons were trained in hands-only CPR.

## CHALLENGES

Through these efforts, improvements can be seen, but sustained actions, budget and results were not achievable due to the change of administration in 2018. Access to information about patients and patient outcomes is limited. While new interest is currently growing, municipal administration makes it difficult to maintain focus on these programs beyond three years.

## RESULTS

The following chart illustrates the outcomes of varying scenarios from 2006-2019. However, the capacity to maintain a complete registry diminished during 2017-2018 due to limited access to information and lack of a comprehensive registry.

	2006	2009	2013	2017	2018	2019*
<b>n</b>	147	204	79	62	68	68
<b>Call-Ambulance Arrival Interv</b>	NA	NA	NA	10 min ±7	11 ±6	10 ±6
<b>Colapse-arrival interval</b>	23 min ±19	50 min ±64	17 min ±15	NA	NA	NA
<b>CPR before ambulance arrival</b>	2%	10.80%	44.40%	NA	NA	NA
<b>Police on site before ambulance</b>	NA	NA	63.7%	30.6%	43.8%	45.20%
<b>CPR by police</b>	NA	NA	1.50%	24.5%	18.4%	24.20%
<b>AED applied by Police</b>	NA	NA	NA	2%	0%	1.6%
<b>VT/VF</b>	desconocido	9.60%	1.50%	0%	7.7%	10%
<b>Ambulance Crew Resuscitation</b>	27.20%	26.50%	98.50%	100%	100%	100%
<b>Defibrillation applied by Ambulance Crew</b>	17.50%	7.40%	20.37%	14.30%	19.60%	15%
<b>ROSC</b>	30%	1.85%	20.27%	24%	42.30%	29.82%
<b>Hospital Discharge survival</b>	0%	0%	2.50%	4 (6.45%)	3 (4.4%)	1 (1.47%)

\*Until april 2019.

## OUTLOOK

The state government is working on a more sustainable plan and lobbying the municipal government to reinitiate its efforts and work toward a single comprehensive registry.

## CONTACT

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