ICUs in emergency departments lower death rates, study says

Published: July 26, 2019 at 9:45 AM

Tauren Dyson

July 26 (UPI) -- Emergency departments with in-house intensive care units have higher survival rates and better overall care, a new study shows.

The findings, published this week in JAMA Open Network, come from research out of the Massey Family Foundation Emergency Critical Care Center, an intensive care unit housed in the emergency department at Michigan Medicine.

Patient mortality rates went down from 2.13 percent prior to opening EC3 to 1.83 percent after its launch. ICU admissions were also reduced from 3.2 percent to 2.7 percent.

"The time patients have to wait in the emergency department for inpatient critical care resources is increasing nationwide, and longer wait times for intensive care units have been associated with decreased survival rates," Kyle Gunnerson, a researcher at Michigan Medicine and study author, said in a news release.

The study included electronic health data for every Michigan Medicine emergency department visit from September 1, 2012, and July 31, 2017. The researchers analyzed 30-day patient mortality outcomes along with ICU admission rates for all patients who visited the emergency department before and after the EC3 opened.

On average, the department gets roughly 250 visits each day, the researchers say.
Since the EC3 arrived with its five trauma bays and nine patient rooms, it has helped physicians save one life for every 333 patients who visit the emergency room.

"We hope this study and the level of care we are able to provide in our EC3 will encourage other health systems to consider implementing an emergency medicine department-based intensive care unit in their own hospital," said Renee Havey, a researcher at Michigan Medicine and study co-author.