Rapid ambulance response improves survival after sudden out-of-hospital cardiac arrest

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The projected results for shortening the individual response time by 10%, 20%, or 30% in Germany would mean that 370, 515, or 634 additional patients would survive every year.

The authors conclude that on the basis of these data, additional attempts should be made to shorten ambulance response times and the time to resuscitation. They propose that for all of Germany, a standardized response time of 85% within 8 minutes should be achieved. Furthermore, they request improvements in the rates and quality of bystander resuscitation.


Provided by Deutsches Ärzteblatt International

Shorter ambulance response times are associated with a higher rate of survival in patients with sudden out-of-hospital cardiac arrest. The later discharge rate is also affected substantially by bystander resuscitation measures at the site of the incident. These are the results of a cohort study reported in the current issue of Deutsches Ärzteblatt International.

The working group of Andreas Bürger and Jan Wnent evaluated 10,853 data sets from the German Resuscitation Registry for the years 2010-2016. Longer ambulance response times meant less successful resuscitation attempts: without bystander resuscitation and a mean response time of 1 minute and 10 seconds, the discharge rate fell from 12.9% to 6.4%; with bystander resuscitation and a comparable mean response time, the discharge rate fell from 22% to 14%. Shorter response times meant that resuscitation was started earlier and the discharge rate with good neurological outcomes was higher.