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Letter to the Editor

Cardiac Arrest Center Certification for out-of-hospital cardiac arrest patients successfully established in Germany



To the Editor

In 2017, the survival rate of resuscitated patients suffering from out-of-hospital cardiac arrest (OHCA) was 8% in 28 countries throughout Europe.¹ Most attempts to increase this rate in the last decades have focused on the immediate care for patients before reaching the hospital. The OHCA patient care after reaching the hospital became increasingly important with the introduction of temperature management and acute percutaneous coronary interventions (PCI).² Since 2015 - based on all available data – the international resuscitation guidelines recommend the introduction of specialized hospitals for patients following OHCA, so called Cardiac Arrest Centers (CAC).² Subsequently, the benefit of establishing CACs has been supported by further data.^{3,4}

Following these guidelines, in 2016, under the patronage of the German Resuscitation Council (GRC), a team of anesthesiologists, cardiologists, emergency medicine specialists and intensive care physicians in Germany initiated a Delphi process and outlined the most important basic criteria for a CAC. These criteria were approved by the GRC, the German Society of Anaesthesiology and Intensive Care Medicine (DGAI), the German Society of Cardiology (DGK) and the German Society of Medical Intensive Care and Emergency Medicine (DGIIIN).⁵ The primary aim of these criteria and the certification of CAC is to improve the quality of post-resuscitation care for OHCA patients nationwide.

The established interdisciplinary CAC criteria include major aspects of structural quality, like the immediate possibility of 24/7 PCI and intensive care capacity with targeted temperature management,

process quality like Standard Operating Procedures (SOP) for interface communication between Emergency Medical Service (EMS) and hospital emergency physicians, transfer of emergency patients after OHCA, prognostication, and quality assessment such as standardized recording of course of treatments, time intervals and outcomes. Moreover, defined treatment paths for OHCA patients need to be established in CAC, and transparent communication about results across the rescue chain is necessary.⁵

In Germany, and under the Guidance of GRC and DGK, an initial pilot project of the CAC certification did start at the end of 2018 and included eight major hospitals till mid 2019.

Subsequently starting in August 2019, the CAC certification roll-out began across the country, so that at the end of 2019, 31 hospitals have been successfully audited as CAC. After a brief interruption in spring 2020 because of the Covid-19 pandemic, the 50th CAC audit has been successfully reached in August 2020 (Fig. 1), and the 60th CAC audit is in September 2020.⁶

This interdisciplinary CAC certification process constitutes an important and major step in reaching a nationwide comprehensive net of CACs in Germany. First audits in other German speaking countries were planned for spring 2020 and had to be postponed to autumn 2020 because of the Covid-19 pandemic. The introduction of the CAC certification is being scientifically evaluated regarding the improvement of outcome for OHCA patients. The whole interdisciplinary process, the CAC criteria and the roll-out might be useful as a blueprint for similar activities and CAC certifications in other countries.

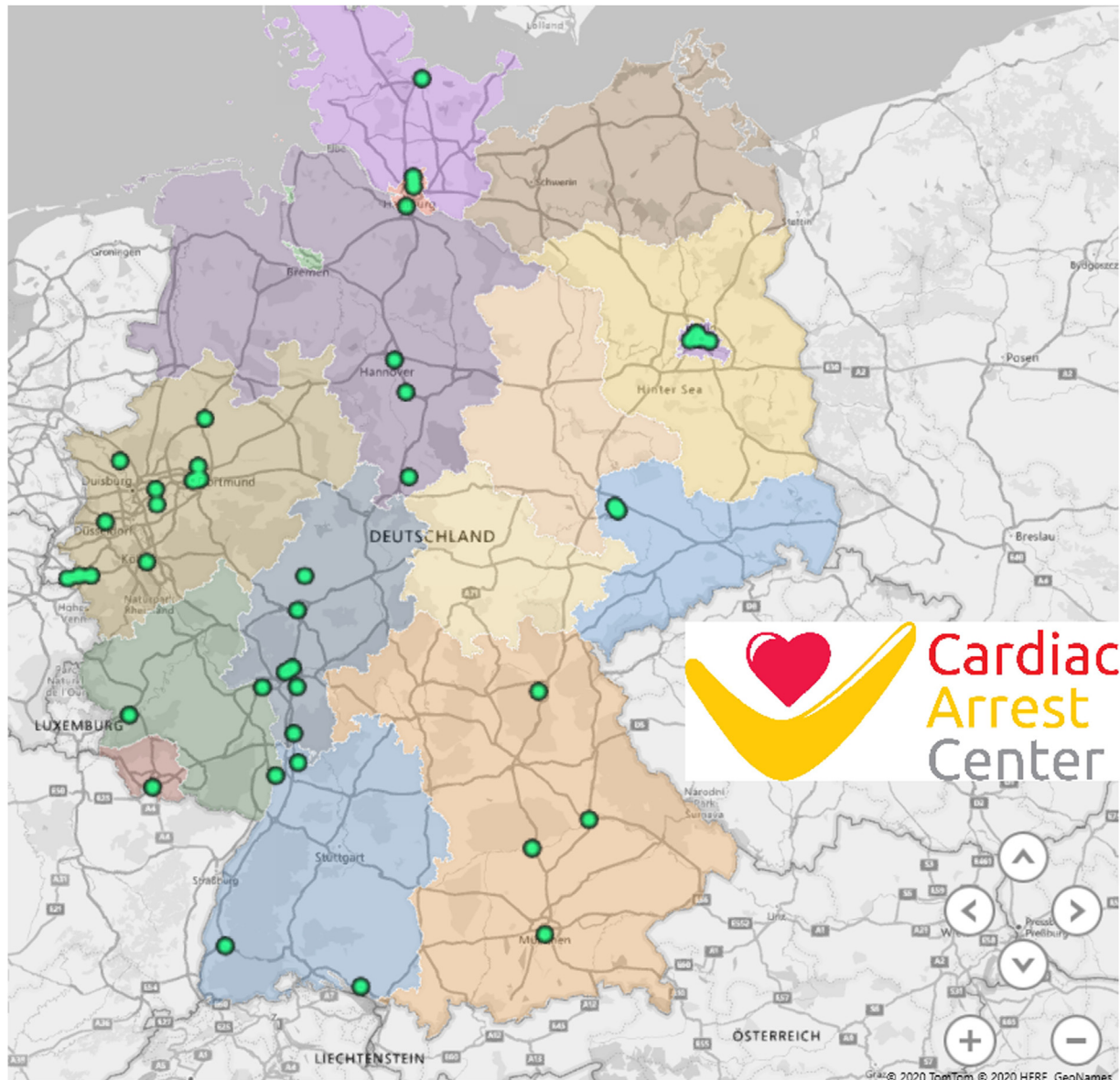


Fig. 1 – Map of the first 50 audits in Germany including the Cardiac Arrest Center Certification logo.

Conflict of interest

Nadine Rott works for the German Resuscitation Council. Bernd W. Böttiger is treasurer of the European Resuscitation Council (ERC); Chairman of the German Resuscitation Council (GRC); Member of the “Advanced Life Support (ALS) Task Force of the International Liaison Committee on Resuscitation (ILCOR); Member of the Executive Committee of the German Interdisciplinary Association for Intensive Care and Emergency Medicine (DIVI), Founder of the “Deutsche Stiftung Wiederbelebung”; Associated Editor of the European Journal of Anaesthesiology (EJA), Co-Editor of “Resuscitation”; Editor of the Journal “Notfall + Rettungsmedizin”, Co-Editor of the Brazilian Journal of Anesthesiology. He received fees for lectures from the following companies: Forum für medizinische Fortbildung (FomF), Baxalta Deutschland GmbH, ZOLL Medical Deutschland GmbH, C.R. Bard GmbH, GS Elektromedizinische

Geräte G. Stemple GmbH, Novartis Pharma GmbH, Philips GmbH Market DACH, Bioscience Valuation BSV GmbH. The other authors declare no conflict of interest.

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