

# Mönchengladbach Fire Brigade: Making Success Measurable

More than 70,000 people suffer from sudden cardiac arrest (SCA) every year in Germany. Tragically, only 5% of these SCA victims survive.

To achieve a positive outcome in every case, professional rescuers must continuously improve the quality of their care. This includes considering the unique requirements of each situation, and more and more involves handling of bystanders — either instructing them as supportive resource or helping to calm them down.

### Building the base

“In an emergency with life-threatening situations, all things have to fit together like mosaic tiles — not only the disposition of the rescue equipment and team, but above all, the accompaniment of the bystanders on site with the patient,” says Dr. Marc Deußen, Medical Director Rescue Service of the Mönchengladbach Fire Brigade.

Without immediate resuscitation, an SCA victim’s chance of survival decreases by 10% every minute. Since it takes an average of 8-10 minutes for a rescue service to arrive, resuscitation efforts by non-professionals (lay resuscitation) can help improve survival rates.<sup>1</sup>

The lay resuscitation process starts in parallel while the professional team is dispatched to the scene. Control center employees guide the bystanders on site via telephone. When the EMS team arrives, they will find a solid base on which to provide care. Since 2014, Mönchengladbach Fire Brigade has partnered with ZOLL to further optimise the quality of resuscitation by their teams and improve survival rates.

### Feedback boosts success

The Mönchengladbach Fire Brigade chose to use ZOLL equipment because it enables them to continuously assess and improve their operations.



<sup>1</sup>German Heart Foundation e.V.



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## Consistent improvement involves measuring and analysing resuscitation performance — both success and failure — to get the right indication for training.

The X Series® supports the rescue service by making the quality of care measurable: Real CPR Help® technology displays real-time feedback during resuscitation on an integrated CPR dashboard. During resuscitation, a pressure sensor is placed on the patient's sternum to measure compression depth (which should be between 5 and 6 cm) and the compression rate (between 100 and 120 compressions per minute).\* A release indicator also guides full recoil of the chest after each compression.

"In the beginning, many people saw the device as a limitation. You have to get used to it. But in the end, we all see it as a resource, because we can see the quality of the resuscitation," says Jenny Beesk, Emergency Paramedic at the Mönchengladbach Fire Brigade.

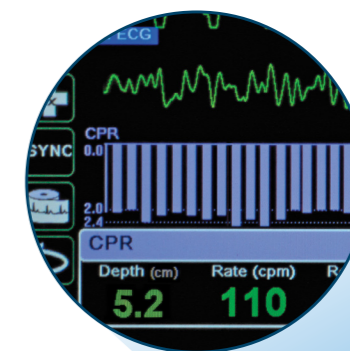
Consistent improvement involves measuring and analysing resuscitation performance — both success and failure — to get the right indication for training. These factors together make it possible to accurately assess resuscitation quality.

### Improving care through data

ZOLL supports teams both during and after rescue operations, enabling them to debrief each individual case and analyse it in detail.

Using the secure online tool RescueNet® CaseReview, care providers can review compression rate and depth, chest compression release velocity, and timing of compression pauses for post-evaluation analysis. The Mönchengladbach Fire Brigade uses this data to identify areas of improvement and reduce errors and recurring issues that may impact the rescue.

This data analysis enhances training by highlighting and contrasting the differences between positive and negative case studies. This approach to training not only helps improve the quality of care, but it also increases motivation among team members.



Real CPR Help® technology displays real-time feedback during resuscitation on an integrated CPR dashboard.



\*European Resuscitation Council Guidelines for Resuscitation 2015



*"You can only improve what you measure."*

*– Dr. Marc Deußen, Mönchengladbach Fire Brigade*

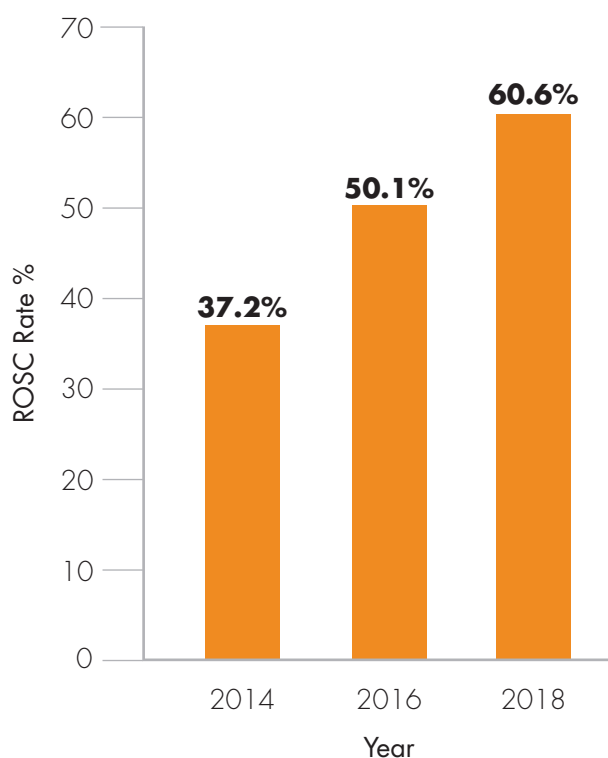


### Measurable success leads to positive outcomes

Thanks to ZOLL technology, the Mönchengladbach Fire Brigade can measure the quality of its resuscitation in real time, and the excellent results it achieves keeps employee motivation high.

In addition, the German Reanimation Registry shows that the Mönchengladbach team consistently ranks at the top of the national benchmarks, reaching the top position in 2018 for the first time.\* With one of the highest ROSC rates in Germany, the Mönchengladbach Fire Brigade has a proven record of success. More than 60% of its resuscitation cases result in ROSC — and its success will only continue.

Development of ROSC Rate



Watch the video about Mönchengladbach Fire Brigade here: [zoll.com/monchengladbach](https://zoll.com/monchengladbach)

\*Abstract from „2018 Annual Benchmarking Statistics“ of German Reanimation Registry (customer owned)