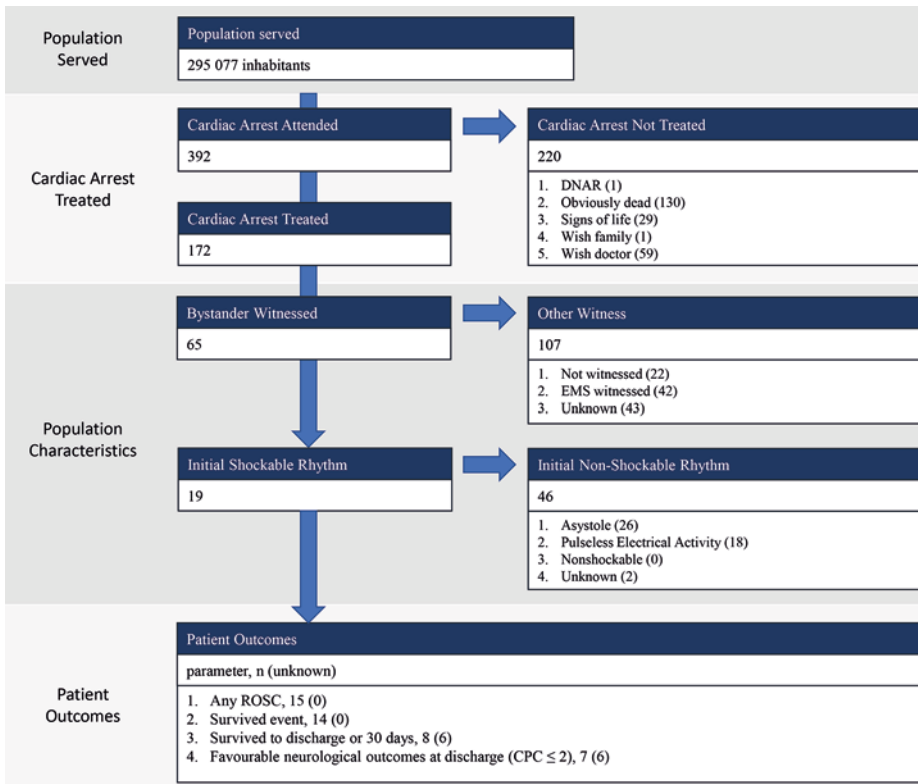


Fig. 2. Utstein OHCA flowchart for system efficacy (Utstein comparator)

in the Utstein comparator group, survival to hospital discharge was slightly higher in the KV (42.1%) compared to 30% in EuReCa ONE and 31% in EuReCa TWO (5,6).

The results of this study indicate that the EMS of the Karlovy Vary Region is performing well in several areas, with outcomes that surpass the Czech Republic average reported in the EuReCa TWO study, particularly in terms of

survival rates and neurological outcomes. This suggests that the local methods for managing out-of-hospital cardiac arrests are effective and that improved coordination and quicker responses might be key contributing factors.

In conclusion, this report provides a comprehensive overview of OHCA outcomes in the Karlovy Vary Region, establishing a baseline for future quality improvement initiatives.

Continued efforts to optimize CPR quality, enhance dispatcher-assisted CPR, and improve data accuracy will be essential for advancing patient outcomes in emergency care in this region.

Limitations

Before drawing any definitive conclusions, it is essential to acknowledge the inherent limitations of our study. The database primarily depends on information recorded by healthcare providers, and despite researchers' efforts to verify this data from multiple sources, it remains prone to human error. Additionally, the report contains missing and unknown data that may influence the overall presentation of the findings. As this is a one-year report, trends over time will be more critical for quality improvement than the results from a single year.

Conclusion

In 2023, the EMS of the Karlovy Vary Region handled 392 cardiac arrest cases, with a 43.9% resuscitation rate and an incidence of 133 per 100,000 residents. Layperson CPR was widely initiated, survival to hospital admission was 36%, and survival to discharge or 30 days was 15.1%. A good neurological outcome was achieved in 12.2% of cases. These results highlight the critical need for ongoing trend monitoring and improvements in CPR quality.

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