Tab. 1. *Results presented as core and supplementary items of the 2024 Utstein template*

Dispatch core		
Dispatcher OHCA recognition	yes no unknown not recorded	154 4 14 0
Dispatcher CRP instructions	yes no unknown not recorded	97 73 2 0
Reasons dispatcher instructions NOT provided	CA occurred later CPR in progress landline non cooperating not recognized other EMS third party trapped willing but unable not recorded	22 5 1 4 2 24 5 1 7 2
Dispatch supplemental		
Time to dispatcher OHCA recognition (not recorded in 60 cases)	1:59 (1 : 21; 3 : 10)	
Patient core		
Age	68 (56; 75)	
Sex	male female	111 61
Witnessed arrest	yes, bystander EMS no unknown	65 42 22 43
Arrest location	residence public building street work/office long-term-care sport facility EMS ambulance prison other unknown not recorded	93 9 28 3 13 4 9 2 7 3 1
Bystander CPR	CCO CPR full CPR any bystander w/o additional information no CPR unknown	101 58 4 8 1
Bystander AED use	AED used shock delivered/AED used no shock delivered/AED used unknown shock/AED not used/not recorded	11 7 4 161
First arresting rhythm	VF pulseless VT PEA asystole not recorded	48 1 44 74 5
Presumed cause	medical trauma drowning/electrocution asphyxia Not recorded	153 7 1 8 3
Patient supplemental		
CPR first	bystander person sent to help EMS not recorded	96 16 59 1

re providers through status updates in car computers and were verified in Fleetware software (Radium s.r.o., CZ) using GPS location and timestamps.

The Cardiac Arrest Registry of the Emergency Medical Services in the Karlovy Vary Region is a closed database with restricted access. All data protection regulations are strictly adhered to, and reports like this one are presented without any patient-identifying information.

Results

In 2023, the Emergency Medical Services of the Karlovy Vary Region received 392 calls indicating signs of cardiac arrest, of which 172 patients (43.9 %) were resuscitated. The incidence was 133 cardiac arrests per 100,000 inhabitants. The most common reasons for not continuing layperson CPR were signs of death (33.2 %, n = 130), the decision of the physician on site (15.1 %, n = 59), and the presence of signs of life (7.4 %, n = 29). For further details, refer to the Utstein OHCA flowchart for system effectiveness (attempted resuscitation) in Figure 1 and the Utstein OHCA flowchart for system efficacy (Utstein comparator) in Figure 2.

Layperson CPR was initiated in 94.8 % (n = 163) of cases, with dispatcher-assisted CPR provided in 59.5 % (n = 97). In 101 cases (62 %), chest-only CPR was administered, while full CPR was provided in 58 cases (35.6 %). Data on the type of CPR provided is missing for 4 cases. The reasons for not providing telephone-assisted CPR are detailed in Table 1.

Of the patients, 64.5 % were male, with a median age of 68 years (IQR 1,3: 56; 75). Patient characteristics are further described in Table 1. Fifty-four percent (n = 93) of OHCAs occurred at home, and 62.2 % (n = 107) were witnessed by someone.

The primary outcome of OHCA, defined as survival to hospital admission, was 36 % (n = 62; 0 missing data). The secondary outcomes, defined as survival to discharge or 30 days, were 15.1 % (n = 26; missing data in 11 cases). A good neurological outcome at discharge or 30 days (CPC 1 or 2) was recorded in 12.2 % (n = 21; missing data in 15 cases). Detailed results of the core and supplementary items of the 2024 Utstein protocol are provided in Table 1.