Self-assessment
Resuscitation system
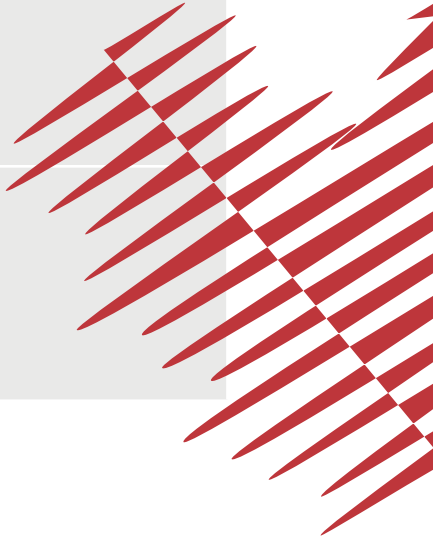
Out-of-hospital version

SRC

Swiss
Resuscitation
Council

1. INSTRUCTIONS

The self-assessment tool supports hospitals, emergency services and other organisations in determining the maturity of their resuscitation system and identifying any need for action. To this end, the objectives of the national survival strategy for cardiac arrest are made available in an assessment matrix. The result of the self-assessment can help the responsible management to prioritise the measures required to improve the chances of survival.
The SRC welcomes feedback and suggestions for improvement via the homepage www.resuscitation.ch or by e-mail to info@resuscitation.ch.

The assessment refers to the following documents:	
Summary of the assessment:	
Summary of the need for action	
The assessment was carried out by	
Place, date, signature	

A.   Prevention

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
A1) Inhabitants of Switzerland are aware of the controllable risk factors for cardiovascular disease and adopt behavioural measures to reduce the personal risk.	• Incidence of risk factors in the population • Incidence of cardiac arrest • Incidence by cause • Incidence by age group • Proportion of hospitals with MET or RRT **Measurement tools/data sources** • SWISSRECA • FSO • SHF	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

B. Recognition

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
B1) If there are signs of a time-critical, life-threatening emergency situation[1], the affected individual or an observer immediately calls the 144 emergency number.	• Interval from symptom onset to alarm • Awareness of the 144 emergency number • Awareness of the internal hospital emergency number **Measurement tools/data sources** • SWISSRECA • AMIS Plus • Swiss Stroke Registry	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
B2) Anyone observing a cardiac arrest immediately calls the 144 emergency number.	• Interval from symptom onset to alarm **Measurement tools/data sources** • SWISSRECA	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

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1   Chest pain, respiratory distress, unconsciousness, stroke, severe injury ('First Hour Quintet')

C.   Cardiopulmonary resuscitation

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
C1) In the event of cardiac arrest, any bystander present immediately perform chest compressions and ventilation (chest compressions as a minimum) after calling emergency services and until organised help arrives. In cases of cardiac arrest in children, increased attention must be paid to ventilation.	• Percentage of resuscitation by first-aiders • Interval from cardiac arrest to resuscitation by first-aiders • HPCPR parameters (rate, depth, pressure point, recoil, minimal interruption) • Ventilation for children **Measurement tools/data sources** • SWISSRECA • AED data	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
C2) Whenever possible, the will of the patient should be respected when it comes to a decision to start resuscitation.	• Percentage of DNAR decisions • Pre-existing CPC vs resuscitation decision • Delta CPC (pre-existing vs outcome) **Measurement tools/data sources** • SWISSRECA • QM processes	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

C.   Cardiopulmonary resuscitation

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
C3) The highest possible proportion of the Swiss population receives initial or follow-up BLS-AED training every year. The focus is on training school students and members of at-risk groups.	• Number of participants • Retention percentage **Measurement tools/data sources** • Participant statistics from SRC etc.	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
C4) Upon calling emergency services, first-aiders receive standardised and structured guidance from dispatchers on resuscitation, including the use of an AED (T-CPR).	• Percentage of cardiac arrests detected by telephone (telephone triage) • Percentage of guided T-CPR • On-floor time **Measurement tools/data sources** • SWISSRECA • Data QM processes	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
C5) Organised first-aiders (first responders, rapid responders) are systematically dispatched to cardiac arrest situations and perform high-quality basic life support (HPCPR) until arrival of Emergency Medical Service.	• Percentage of dispatched calls • CPR performance **Measurement tools/data sources** • SWISSRECA	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

D.   Defibrillation

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
D1) In cases of cardiac arrest, an Automated External Defibrillator (AED) is used within 5 minutes.	• Interval from cardiac arrest until first defibrillation • Interval from calling 144 until first defibrillation • Distribution maps • Discrepancy between availability and use (geolocation) • Number of AEDs deployed **Measurement tools/data sources** • SWISSRECA	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
D2) AED data are systematically read and assessed and form part of the quality management system.	• Number of heart rhythms analysed **Measurement tools/data sources** • SWISSRECA	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

E. Advanced resuscitation measures

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
E1) Affected individuals receive advanced treatment by professional Emergency Medical Service as quickly as possible.	• Response times and intervals **Measurement tools/data sources** • SWISSRECA • Data QM processes • IVR guidelines for validation of Emergency Medical Service	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
E2) Emergency Medical Service provide HPCPR.	• HPCPR parameters • Capnography **Measurement tools/data sources** • Data QM processes	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
E3) Emergency Medical Service are guided by current research and best practice evidence on resuscitation.	• Emergency Medical Service demonstrate how they ensure this as part of IVR validation **Measurement tools/data sources** • Not currently defined	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

E.   Advanced resuscitation measures

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
E4) People who have experienced cardiac arrest are transported directly to an appropriate hospital. Secondary transport is to be avoided.	• Causes of cardiac arrest **Measurement tools/data sources** • SWISSRECA • Data QM processes	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
E5) ALS teams systematically check criteria for starting and continuing or stopping resuscitation.	• Data QM processes • SWISSRECA	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

F. Post-resuscitation care

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
F1) Affected individuals receive standardised and structured intensive medical care following ROSC.	• Ventilation parameters • Circulation parameters • TTM • 12-channel ECG (as surrogate parameter) • PCI **Measurement tools/data sources** • SWISSRECA • Data QM processes	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
F2) Outcome parameters are systematically recorded in the event of successful resuscitation.	• ROSC • Hospital discharge rates • Outcome scores **Measurement tools/data sources** • SWISSRECA	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
F3) Where resuscitation is futile, the individual's suitability for organ donation is investigated.	• Organ donation trends **Measurement tools/data sources** • Data capture in hospital • Swisstransplant statistics	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

G.   Aftercare

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
G1) Affected individuals and their relatives receive offer of support for psychological processing during and after resuscitation.	• Degree of utilisation **Measurement tools/data sources** • Add question on offer and use of support to SWISSRECA	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
G2) Bystanders, first responders and professionals receive offer of support for psychological processing.	• Degree of utilisation **Measurement tools/data sources** • In SWISSRECA, add question on supply and use of support	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

H. Culture and context

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
H1) The participating organisations support a continuous improvement approach (culture of excellence) to increase the chances of survival after cardiac arrest.	· Overview of successful projects	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
H2) Local system managers record all relevant data in SWISSRECA and derive improvement measures from the results of analysis.	· SWISSRECA participation · Completeness and quality **Measurement tools/data sources** · SWISSRECA · IVR validation procedure for Emergency Medical Service and EMCCs	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
H3) Results of national data collection are published regularly and measures derived from them. System comparability increases with the degree of transparency.	· Publication frequency and reach	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |

H.   Culture and context

Out-of-hospital cardiac arrest (OHCA)	Measurement criteria	Degree of fulfilment 1 not fulfilled at all 5 fully fulfilled	Brief description Current status and gaps	Concrete measures	Priority 1 urgent 2 necessary 3 desirable
H4) All affected individuals are guaranteed access to resuscitation measures; disadvantages are reduced as much as possible. This requires solutions tailored to local and regional needs.	• Establish continuous national monitoring with the FSO	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
H5) There is clear political embedding of the topic of resuscitation.	• Not currently defined	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |
H6) Collaboration with research institutions and industry partners to develop new solutions.	• Not currently defined	1 | 2 | 3 | 4 | 5 not assessable			1 | 2 | 3 |