### **EPIDEMIOLOGY 2021**

# 5 TOP MESSAGES



### REGISTRIES

- Health systems should have population-based registries which monitor the incidence, case mix, treatment and outcomes for cardiac arrest
- Registries should adhere to the Utstein recommendations

## OUT OF HOSPITAL CARDIAC ARREST

- Data from registries should inform health system planning and responses to cardiac arrest
- All European countries are encouraged to participate in the European Registry of Cardiac Arrest (EuReCa) collaboration

### **IN HOSPITAL CARDIAC ARREST**

 Data from registries should inform health system planning and responses to cardiac arrest

## **LONG TERM OUTCOMES**

 Clinicians should be alert to longer term consequences of cardiac arrest and refer for specialist support where required

## 5 POST CARDIAC ARREST REHABILITATION

• There is a need for more research and greater provision of post resuscitation rehabilitation services

#### **REGISTRIES**



#### **KEY EVIDENCE**

countries participated in the European Registry of Cardiac Arrest (EuReCa) collaboration



Out of hospital cardiac arrest registries exist in approximately

of European countries but the completeness of data captures varies widely

#### **KEY RECOMMENDATIONS**



Health systems should have population-based registries which monitor the incidence, case mix, treatment and outcomes for cardiac arrest



Registries should adhere to the Utstein recommendations for data definitions and outcome reporting



# EPIDEMIOLOGY OF OUT OF HOSPITAL CARDIAC ARREST

#### **KEY EVIDENCE**



The annual incidence of OHCA in Europe is between 67 to 170 per 100 000 inhabitants



The rate of bystander CPR varies between and within countries (average 58%, range 13% to 83%)



The use of automated external defibrillators (AEDs) remains low in Europe (average 28%, range 3.8% to 59%)



Survival rates at hospital discharge are on average 8%, varying from 0% to 18%

#### **KEY RECOMMENDATIONS**



Data from registries should inform health system planning and responses to cardiac arrest



All European countries are encouraged to participate in the European Registry of Cardiac Arrest (EuReCa) collaboration



# EPIDEMIOLOGY OF IN HOSPITAL CARDIAC ARREST

#### **KEY EVIDENCE**



The annual incidence of IHCA in Europe is between 1.5 and 2.8 per 1,000 hospital admissions



Factors associated with survival are the initial rhythm, the place of arrest and the degree of monitoring at the time of collapse



Survival rates at 30 days / hospital discharge range from 15% to 34%

#### **KEY RECOMMENDATIONS**



Data from registries should inform health system planning and responses to cardiac arrest

### **LONG TERM OUTCOMES**



#### **KEY EVIDENCE**



Amongst survivors with a good neurological outcome, neurocognitive, fatigue and emotional problems are common and cause reduced health related quality of life



Patients and relatives may develop post-traumatic stress disorder

#### **KEY RECOMMENDATIONS**



Clinicians should be alert to longer term consequences of cardiac arrest amongst patients and relatives and refer for specialist support where required

# POST CARDIAC ARREST REHABILITATION



#### **KEY EVIDENCE**



There is wide variation in the provision of rehabilitation services following cardiac arrest



Many patients do not have access to post cardiac arrest rehabilitation



Resuscitation guidelines are based on substantially less studies compared to guidelines for acute cardiovascular events/ heart failure

#### **KEY RECOMMENDATIONS**



There is a need for more research and greater provision of post resuscitation rehabilitation services