



Introduction to PAROS

Mission

To improve outcomes from Pre-hospital and Emergency Care across the Asia-Pacific region by promoting high quality research into resuscitation

Vision

Improving outcomes from Pre-hospital and Emergency Care across the Asia-Pacific region

Background

Out of Hospital Cardiac Arrests (OHCAs) are a global health concern. There is an urgent need to better understand the key factors that affect OHCA survival, and to develop methods to improve OHCA survival.

Objectives

This international study has the following objectives:

1. Understand OHCA as a disease in Asia
2. Describe current pre-hospital systems in the Asia-Pacific
3. Provide international benchmarking and study of best practices
4. Impact community awareness and change attitudes towards OHCA
5. Improve OHCA survival by system/ community level interventions

Methods

Data will be collected from both emergency medical services (EMS) dispatch records, as well as ambulance patient case notes. EMS timings will be automatically recorded by the computerised central dispatch system.

Hospital data will be collected from the Emergency Departments, Intensive Care Units and wards. Inpatient discharge summaries and death certificate information will also be assessed. For survivors, quality of life will be assessed with the European quality of life-5 dimensions (EQ-5D). EQ-5D is a standardized instrument used in measuring quality of life. It provides a descriptive profile of patient's health status in 5 dimensions.

Data entry will be done using ePAROS which is an electronic data capture (EDC) system. The EDC is an online, data registry system that will be set up with assistance from Singapore Clinical Research Institute (SCRI), CARES-CDC Atlanta USA, Duke-NUS Graduate Medical School and Singapore General Hospital. Data management will be done by SCRI.

Data entry methods:

- Direct Online Entry

Data can be entered directly into the ePAROS (<http://eparos.org/>) registry with a login ID by designated PAROS coordinator as long as there is an internet connection.

- Export Field Entry

This method allows participating sites who already have existing database to export their data and auto-populate into the ePAROS registry.



PAROS Clinical Research Network (CRN)

The PAROS CRN is a collaborative research group formed in 2010 by dedicated Pre-PEC providers conducting PEC research in the Asia-Pacific region. It promotes collaboration by bringing together like-minded individuals to share experiences and develop joint initiatives for the betterment of PEC.

Currently, research into PEC in the Asia-Pacific region is largely inadequate and poorly coordinated owing to the marked variations in Emergency Medical Services (EMS) systems and outcomes reporting. With PEC conditions such as OHCA being one of the leading causes of death worldwide, the dearth in the understanding of trends and research in PEC underscores the urgent need for more collaborative research and good-quality intervention trials in PEC.

PAROS CRN endeavours to improve outcomes from PEC across the Asia-Pacific region through the creation of a platform to support and stimulate research into effective strategies to improve survival in PEC. The ability to reach out to countries across the Asia-Pacific region means that the Network can adopt a multi-pronged strategy that targets key stakeholders such as the community, EMS and the hospitals in its vision to improve PEC outcomes. By offering practical ways of monitoring and meaningful measurement of PEC outcomes, PAROS CRN has an enormous potential to contribute significantly to PEC research, regardless of whether the study is epidemiological studies or clinical trials.

As a first step, PAROS CRN has identified OHCA as one of its main thrusts. The Network will gather valuable information on OHCA and deepen the understanding of the EMS systems in the region to devise strategies that improve survival. PAROS CRN has a Trial Coordinating Centre based in Singapore and managed by SCRI.

For more information on PAROS CRN, you may wish to contact us at sweesung.soon@scri.edu.sg

Value to Singapore and the Region

PAROS CRN endeavours to answer important questions for the development and revisions of PEC policies. This research has a major social value as it aims to improve outcomes from PEC, including survival rates across the Asia-Pacific region. It will also help to further develop the necessary research infrastructure and strengthen the EMS treatment capability in the region.

Set to be the driving force for PEC research and development in the Asia-Pacific region, PAROS CRN will also establish a role for Singapore as a networking hub and as a contact point for interested research partners. PAROS CRN has forged ties with renowned groups such as the Cardiac Arrest Registry to Enhance Survival (CARES) in the USA, showcasing collaboration with parties beyond the Asia-Pacific region.