

Main Study & Publication Committee Updates

PAROS Main Paper

 Cost-effectiveness of Modifiable Factors for OHCA Survival

Title: Strategies to Improve Survival Outcomes of Out-Of-Hopsital Cardiac Arrest (OHCA): A Simulation Study

Aim: to identify a strategy that maximizes survival upon hospital discharge or 30-days post OHCA

Strategies: 1) reducing response time via purchase of more ambulances 2) increasing CPR training; 3) greater investment in AEDs.

Budget constraint: \$10M, \$20M, \$30M.

Method

- Step 1: determined number of additional ambulances, CPR trainings, and AEDs that could be purchased given \$10M.
- Step 2: simulated changes in ambulance response time, and likelihood of CPR and AED usage as a function of their increased availability.
- Step 3: estimate odds ratios for survival of each factor estimated from PAROS Singapore 2010-2015 data
- Step4: determine the increase in survival probability from each investment strategy.
- **Step 5:** repeat step 1-4 for \$20M and \$30M.

Results and Publication

- Survival at baseline was 4.03% (95% CI: 3.96%-4.10%).
- Increasing number of AEDs achieved the highest survival.

	Ambulance		Bystander CPR		Bystander Defibrillation	
	Survival (95% CI)	No. of pax saved	Survival (95% CI)	No. of pax saved	Survival (95% Cl)	No. of pax saved
\$10M	4.25 (4.18 - 4.33)	4.4	4.09 (4.03 - 4.16)	1.2	4.84 (4.73 - 4.95)	16.2
\$20M	4.33 (4.26 - 4.41)	6	4.15 (4.09 – 4.22)	2.4	5.66 (5.53 - 5.79)	32.6
\$30M	4.40 (4.32 - 4.48)	7.4	4.22 (4.15 – 4.28)	3.8	6.47 (6.33 – 6.61)	48.8

- A poster presentation is accepted by International Society For Pharmacoeconomics and Outcomes Research (ISPOR) Japan, Sep 2018.
- Abstract will be published on Value in Health.

Proposals Withdrawn

- due to timeline and lack of progress

Study Title	Date of Approval	First Author	Status updates_ June 2018	Topic Status
Supraglottic Airways and Endotracheal Intubation	June 2010	Dr Omer Alsakaf	Withdrawn	Topic release to Dr Ki Ok Ahn
Non-Cardiac OHCA in PAROS	April 2011	Dr Young sun Ro	Withdrawn	Open for all
EGDT/ Hypothermia	June 2010	Dr Patrick Ko	Withdrawn	Open for all
In OHCAs, does shortening the response time effect survival?	Oct 2010	Dr Chiang Wen- Chu	Withdrawn	Open for all

Study Updates

Study Title	Approval	First Author	Status updates_June 2018
Paediatric OHCA Resuscitation Outcome	NA	Dr Tham Lai Peng	Published : Epidemiology and outcome of paediatric out-of-hospital cardiac arrests: A paediatric sub-study of the Pan-Asian resuscitation outcomes study (PAROS). Resuscitation. 2018 Feb 5.
Resuscitation time interval at the scene and outcomes after out- of-hospital cardiac arrest in PAROS communities	NA	Prof Sang Do Shin	Published: Association of the Emergency Medical Services-Related Time Interval with Survival Outcomes of Out-of- Hospital Cardiac Arrest Cases in Four Asian Metropolitan Cities Using the Scoop-and Run Emergency Medical Services Model. J Emerg Med. 2017 Nov
Place-Provider Matrix and Time Interval to Initiation of CPR and Defibrillation After OHCA	Aug 2013	Prof Sang Do Shin	Submitted to Resuscitation using Korea Data
Predictive performance of Termination-Of-Resuscitation (TOR) rules in Asia: Are They Accurate Enough?	April 2014	Dr Huang Yu- Sheng	

Study Title	Date of Approval	First Author	Status updates_June 2018
Time Interval between Collapse and Return of Spontaneous Circulation between Various Outcomes in OHCA	June 2014	Dr Sumitro	
A survey on public access defibrillation (PAD) implementation among PAROS members	June 2014	Dr Sheng-Wen Hou	The questionnaire is updated again for adding a section about the use of crowdsourcing app.
Safety practices among Asia EMS	Oct 2014	Dr Sarah Karim	Revising the methodology and to come up with new strategy to get data
Relationship between OHCA burden and cardiac arrest outcomes	Oct 2014	Dr Kuo Chan-Wei	
Outcome Prediction for OHCA Patients Using Statistical Computation	Nov 2015	Dr Liu Nan	Abstract accepted for presentation at EMS Asia, Davao.
Approaches			Manuscript will be ready before the conference.
Factors Influencing Bystander Cardiopulmonary Resuscitation and the Related Outcomes across PAROS Communities	Nov 2015	Dr Jonathan Lu	
Location Characteristics and The Outcome Impact on OHCA among PAROS Communities	Nov 2015	Dr Patrick Ko	

Study Title	Date of Approval	First Author	Status updates_June 2018
Analyzing the utilization of ECMO for OHCA in current situation among PAROS communities	Nov 2015	Dr Patrick Ko	
Early epinephrine administration after 119 call improve favorable neurological outcome in PAROS registry	Nov 2015	Dr Takahiro Hara	Suspended - Unable to find timing data for adrenaline administration in PAROS dataset
Epidemiology of OHCA between developing and developed countries	Aug 2016	Takahiro Hara, Dr Marcus Ong	Finishing Manuscript
Association of outcomes and resuscitative efforts amongst OHCA occurring at night in the Asia-Pacific – a prospective, observational study	Aug 2016	Dr Andrew Ho	Under review
Barriers to dispatcher-assisted cardiopulmonary resuscitation (DA-CPR)	Aug 2016	Dr Marcus Ong	
Resuscitation Academy (RA) 10-Step Implementations in the Pan-Asian Resuscitation Outcomes Study (PAROS) group	Aug 2016	Dr Marcus Ong	
Arrest to first compression time and survival outcome in witness OHCA.	Aug 2016	Dr Yu Jin Lee	

Study Title	Date of Approval	First Author	Status updates_June 2018
The Outcomes of Traumatic or Injured OHCA and Ventricular Fibrillation	Aug 2016	Dr Yen-Pin Chen, Dr Sot Shih-Hung Liu Dr Patrick Ko	
Comparison of dispatcher-assisted cardiopulmonary resuscitation (DA- CPR) practices among Pan-Asian Countries: A web-based survey	Dec 2016	Dr Ng Yih Yng	
Percutaneous coronary intervention provision and outcomes among cardiogenic OHCA in Asian countries	July 2017	Dr Takashi Tagami	
Population aging and proportion of elderly among cardiogenic out-of- hospital cardiac arrest patients: Post-hoc analysis of the Pan Asian Resuscitation Outcomes Study	July 2017	Dr Takashi Tagami	

Changes to Publication Committee

Old Groupings:

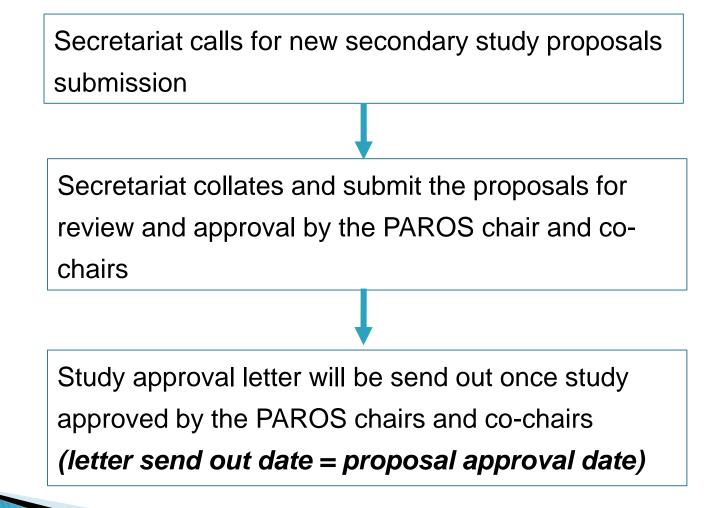
- OHCA Publications Committee Group A (*A/Prof Marcus Ong*)
- EMS Systems Publications Committee Group B (*Prof Sang Do Shin*)
- EMS Survey Publications Committee Group C (*Prof Hideharu Tanaka*)
- ED Survey Publications Committee Group D (*Prof Matthew Ma*)

New Grouping:

The 4 groups will combined into 1 group and lead by the PAROS Chair and Co-chairs

Note: There will be no change to the new study proposal submission process and the authorship guidelines.

Submission Process



Study Timeline

Study lead has to complete and publish the study:

- 1. Within 2 years from the proposal approval date if it's a secondary analysis of the existing data
- Within 4 years from the proposal approval date if it's a new study requiring additional data

If there is no publication after the stated timeline, your study will be withdrawn and the topic will be release to other interested members

Note: There will be regular housekeeping on the study progress. Please help to update your study status when requested by the PAROS secretariat.

Authorship Guidelines

- Authorship is based on contribution of data
- Members who have any concerns regarding authorship can approach the chair and co-chairs
- Authors are free to use their own country's data for secondary papers and can choose their own collaborators. However, the paper needs to acknowledge PAROS CRN
- Co-authors will be suggested by the Publication Committee Chairs for secondary papers that use the combined PAROS database; lead author can propose changes subject to Publication Committee Chairs' approval

Authorship Guidelines

- Authors are required to sign a letter of undertaking when dataset is given to them
- Abstracts and papers must be submitted to chairs before it can be submitted for publication. This is also to prevent overlapping of materials, which may constitute plagiarism. *Note: Draft manuscripts will be ran through the Turnitin software to identify any overlapping materials*