



ASIA-PACIFIC RESUSCITATION CONFERENCE 2026

10-12 2026 JULY

 ST. GILES WEMBLEY
PENANG, MALAYSIA

Global Collaboration for Better Resuscitation



Organiser : In Collaboration with :



Scan to view website
<https://aprc2026.penangheartsafe.org.my>

Supported by :





TABLE OF CONTENTS

- 01 **Welcome Message** >
- 02 **Committee** >
- 03 **Programme** >
- 04 **Lecture Summary** >
- 05 **Oral Presentation Finalist** >
- 06 **Poster Presentation Finalist** >
- 07 **Abstract Submission** >
- 08 **Our Sponsors** >
- 09 **Registration Fee** >
- 10 **Visit Penang** >
- 11 **Terms & Conditions** >

WELCOME MESSAGE

Welcome to the Asia-Pacific Resuscitation Conference 2026!

On behalf of the Malaysia Resuscitation Association (MyRES) in collaboration with Penang Heart Safe Society (PHSS), we are delighted to invite you to join us for a very special conference involving many experts in International Liaison Committee on Resuscitation (ILCOR) as our speakers. The conference will be held on 10th to 12th July 2026 at St. Giles Wembley Hotel, Penang, Malaysia.

The Highlights of this conference is featuring the latest Cardiopulmonary Resuscitation (CPR) Guidelines 2025 updates and insights. This International Resuscitation Conference is a scientific gathering for healthcare professional, research and advocates to discuss and share the latest technological advancement, new guideline, multidisciplinary approach, survivor involvement, community and public health regarding the best practice in CPR and Emergency Care.

The events feature presentation and networking opportunities focused on topics like Basic Life Support and Advanced Life Support, resuscitation, technology and improving community response to cardiac arrest. The goal is to improve patient outcome and save more lives by fostering collaboration and implementing new knowledge in the field. The Organizing Committee and Scientific Committee are working hard to make the conference highly impactful and memorable.

We hope the Pharmaceutical Company and Individual Industry will come forwards and join us for the exciting conference and help us to make it a great success. The Organizing Committee shall ensure that the event be of great value for all the parties aligned with the theme "Global Collaboration for Better Resuscitation".



WELCOME MESSAGE

Our distinct honour and immense pleasure to extend a very warm welcome to each and every one of you to this prestigious International Conference here in the beautiful island of Penang, the "Pearl of the Orient".

Selamat datang ke Pulau Pinang!

欢迎来到檳城

Huānyíng lái dào bīn chéng

பிளாங்கு தீவுக்கு வருக.

Piñāñku tīvukku varuka.

Best Regards,

Dato Dr. Luah Lean Wah

Advisor of Asia-Pacific Resuscitation Conference 2026

President of Malaysia Resuscitation Association (MyRES)

Senior Consultant Anesthesiologist, Hospital Lam Wah Eee, Penang.

Dr Hajjah Suhaida Hanis Binti Haji Johani

Organizing Chairman of Asia-Pacific Resuscitation Conference 2026

Vice President of Penang Heart Safe Society (PHSS)

Head of Department and Consultant Emergency Physician,

Hospital Kepala Batas, Penang

Coordinator and Instructor Trainer of National Committee on

Resuscitation Training (NCORT)



COMMITTEE

CORE COMMITTEE

Dato Dr Luah Lean Wah

Advisor

Dr Hajjah Suhaida Hanis Binti Haji Johani

Organising Chairperson

Dr Mohamed Hanafi Bin Mohd

Vice Chairman

Clinical A/P Dr Tan Kean Chye

Secretary

Dr Theyveeka Selvy d/o Rajoo

Secretary

Mr Jeff Yeong Keng Seng

Treasurer

Associate Professor Dr Neoh Siew Hong

Treasurer

SCIENTIFIC COMMITTEE

Dr Shazharn Muhammad Zain

Scientific Chairman

Prof Madya Dr Muhammad Bin Maaya

Scientific Committee Member

Dr Noor Azleen Binti Ayop

Scientific Committee Member

Dr Pon Kah Min

Scientific Committee Member

Dr Kwanhathai Darin Wong

Scientific Committee Member

Dr Mohd Fazrul Bin Mokhtar

Scientific Committee Member

TECHNICAL COMMITTEE

Dr Muhammad Fatah Bin Md Radzi

Stage Manager

En Khairudin Bin Kadir

Floor Manager

Madam Zurina Binti Abd Majid

Floor Manager



COMMITTEE

ACCOMMODATION & REGISTRATION

Dr Illiana Syahmun Binti Mohd Razally

Leader

Dr Ooi Poh Ling

Member

Mr Mohd Farizie Bin Mohd Rozi

Member

FOOD & CATERING & GALA DINNER

Dr Fathiyah Binti Abdul Gani

Leader

Madam Tan Saw Ean

Member

Madam Chin Seok Kheng

Member

SOUVENIRS & CERTIFICATES

Dr Gayatheri d/o Subramaniam

Leader

Dr Wong Nee Nee

Member

Mr Mohamad Hafizudin Bin Mohamad Nasir

Member

IT & PROMOTION, WEB & TECHNICAL

Dr Chow Chee Toong

Leader

Dr Tan Chun Chau

Member

Mr Douglas Yeap Ewe Ping

Member



COMMITTEE

VVIP, PROTOCOL & OPENING CEREMONY

Mr Rayson Khoo Beng Sui

Member

Madam Yee Jun Ni

Member

SPONSORSHIP & BOOTH

Dr Goh Hin Kwang

Leader

Dr Sugumar s/o Samogam

Member

Dr Naimah Azrin Binti Ahmad

Member

Dr Ahmad Asraff Bin Azman

Member

Mr Kelvin Yeoh

Member

LOGISTIC & LIAISON OFFICER

Dr Shahira Binti Md Ismail

Leader

Mr Faizal Izzani Bin Ahmad

Member

Mr Mohd Syuwardy Bin Saari

Member

MASTER OF CEREMONY

Dr Adeline Marie A/P Gnanasegaran

Master of Ceremony



09 JULY 2026
THURSDAY

PRE-CONGRESS WORKSHOP

Basic Life Support Instructor Course

8:00 AM - 8:15 AM	Registration
8:15 AM - 8:30 AM	Course Overview
8:30 AM - 9:00 AM	Update in 2025 BLS guidelines
9:00 AM - 9:15 AM	Pre-Test (BLS Assessment)
9:15 AM - 09:45 AM	Tea Break
09:45AM - 12:00PM	Lecture by Participants (5-minute presentation each)
12:00PM - 1:00PM	Lunch Break
1:00PM - 4:30PM	Practical - Skill Stations • Adult CPR - 1 Rescuer • Adult CPR - 2 Rescuers • Airway • AED • Adult FBAO • Infant CPR • Infant FBAO
4:30PM - 5:00PM	Summary & Closing

Training Venue :



Gleneagles Hospital

PENANG

By IHH Healthcare



09 JULY 2026
THURSDAY

PRE-CONGRESS WORKSHOP

Advanced Life Support Instructor Course

8:00 AM - 8:15 AM	Registration
8:15 AM - 8:30AM	Course Overview
8:30 AM - 9:00 AM	Pre-Test (ALS Assessment)
9:00 AM - 9:30 AM	Tea Break
9:30 AM - 11:00 AM	Lecture • Update in 2025 guidelines • How to organize ALS Course • Principles of Adult Learning • Student Assessment • Writing Scenarios
11:00AM - 1:00PM	Lecture by Participants (5-minute presentation each)
1:00PM - 2:00PM	Lunch Break
2:00PM - 4:30PM	Practical (Skill Stations) • Airway • Megacode
4:30PM - 5:00PM	Summary & Closing

Training Venue :



Gleneagles Hospital
PENANG
By IHH Healthcare



10 JULY 2026
FRIDAY

DAY 1

MAIN HALL

CONFERENCE PROGRAMME

7:30 AM - 8:30 AM

Registration

8:30 AM - 9:10 AM

Plenary 1

Overview of ILCOR 2025

Speaker : Professor Peter Morley

9:10 AM - 9:40 AM

Plenary 2

Basic Life Support Resuscitation Updates

Speaker : Professor Lim Swee Han

9:40 AM - 10:00 AM

Tea & Booth Exhibition Visit

10:00 AM - 11:00 AM

Symposium 1 - New Frontier in Resuscitation

Artificial Intelligence and Telemedicine : Revolutionizing
Pre-hospital Triage and Care Consultation

Speaker : Dr Mohd Fahmi Bin Mohd Abdul Kader Jailani

Extracorporeal CPR (ECPR) in the Field and ECMO Technology
in Hospital Setting: News Updates, Feasibility, Ethical Issues
and Outcome

Speaker : Datuk Dr Alzamani Mohammad Idrose

New Monitoring Strategies During Resuscitation

Speaker : Dr Ismail Tan bin Mohd Ali Tan

11:00 AM - 11:10 AM

Q&A

11:10 AM - 11:40 AM

Plenary 3

ACLS updates

Speaker : Professor Jerry Nolan



10 JULY 2026
FRIDAY

DAY 1

MAIN HALL

CONFERENCE PROGRAMME

11:40 AM - 12:10 PM

Plenary 4

Resuscitation Council of Asia (RCA)

Speaker : Professor Sung Phil Chung

12:10 PM - 12:55 PM

Lunch Symposium

12:55 PM - 2:30 PM

Friday Prayers. Rest & Booth Exhibition Visit

2:30 PM - 3:00 PM

Plenary 5

Updates in Paediatric Resuscitation Guidelines

Speaker : Associate Professor Gene Ong Yong-Kwang

3:00 PM - 3:30 PM

Plenary 6

Penang Pre-Hospital Care MECC Coordination

Speaker : Dr Leong Yuen Chin

3:30 PM - 4:00 PM

Plenary 7

Heart Safe Program: Penang's Journey in
Establishing a Heart Safe Community

Speaker : Dato' Dr Luah Lean Wah

4:00 PM - 4:30 PM

Penang Heart Safe Survivor Sharing

4:30 PM - 5:00 PM

Tea & Booth Exhibition Visit

5:00 PM

End of Day 1



11 JULY 2026
SATURDAY

DAY 2

MAIN HALL

CONFERENCE PROGRAMME

7:30 AM - 8:30 AM

Registration

8:30 AM - 9:00 AM

Plenary 8

Neonatal Resuscitation: Translating Evidence Into Better Outcomes

Speaker : Professor Helen Liley

9:00 AM - 9:30 AM

Plenary 9

Maternal Resuscitation & Resuscitation in Other Special Circumstances

Speaker : Professor Peter Morley

9:30 AM - 10:00 AM

Plenary 10

Post Resuscitation Care Updates

Speaker : Professor Jerry Nolan

10:00 AM - 10:30 AM

Tea & Booth Exhibition Visit

10:30 AM - 11:00 AM

Plenary 11

Acute Coronary Syndromes Update

Speaker : Professor Chang Wei Tien

11:00 AM - 12:15 PM

Keynote Address & Opening Ceremony

12:15 PM - 12:45 PM

Plenary 12

Ethical Issues in Resuscitation: Family Presence During Resuscitation

Speaker : Dr Ismail Tan bin Mohd Ali Tan

12:45 PM - 1:30 PM

Lunch Symposium

1:30 PM - 2:00 PM

Rest & Booth Exhibition Visit



11 JULY 2026
SATURDAY

DAY 2 **MAIN HALL**

CONCURRENT SESSIONS

2:00 PM - 2:30 PM

Plenary 13

Empowering Community First Responders: Strategies for Improving Bystander CPR Rates and the Public's Willingness and Ability to Use AEDs

Speaker : Professor Marcus Ong Eng Hock

2:30 PM - 3:50 PM

Symposium 2 - Pre-Hospital Care

MyRES-Q: Uniting Heartsavers and AEDs for a Heartsafe Malaysia

Speaker : Dr Mohd Afiq Bin Mohd Nor

NG MERS 999 : The Revolution of the Malaysian EMS System

Speaker : Dr Leong Yuen Chin

Current Indication and Future Perspective for Point of Care Ultrasound (POCUS) in Resuscitation for Diagnosis in PHC

Speaker : Professor Dr Shaik Farid Abdull Wahab

Data Science Application in Pre-hospital Care

Speaker : Professor Marcus Ong Eng Hock

3:50 PM - 4:10 PM

Q&A

4:10 PM - 4:40 PM

Plenary 14

Integrated Public Private Collaboration in Emergency Medical Services for Mass Gathering Events : The Key Aspects to Strengthening Both Sectors

Speaker : Associate Professor Dr Sarah Binti Shaik Abdul Karim

4:40 PM

End of Day 2

7:00 PM

Faculty Dinner (By Invitation)



DAY 2

ROOM 10 : NEONATAL &
PAEDIATRIC RESUSCITATION

11 JULY 2026
SATURDAY

CONCURRENT SESSIONS

2:00 PM - 2:40 PM

Symposium 3 - Advancing Excellence in Neonatal Care

Early Management of Neonatal HIE: Best Practices vs Pitfalls

Speaker : Dr Pauline Choo Poh Ling

Empowering Neonatal Teams with Simulation

Speaker : Dr Pong Kwai Meng

2:40 PM - 2:50 PM

Q&A

2:50 PM - 3:20 PM

Plenary 15

Advances in Neonatal Transfusion and Haemostatic Care

Speaker : Professor Helen Liley

3:20 PM - 3:50 PM

Plenary 16

Advances in the Management of Life Threatening Arrhythmias in Children

Speaker : Dr Hasri Samion

3:50 PM - 4:50 PM

Symposium 4 - Paediatric Resuscitation & Critical Care

Early Post Cardiac Arrest Care in Children: Translating Evidence into Better Outcomes

Speaker : Dr Pon Kah Min

Surviving Paediatric Sepsis- What's New?

Speaker : Dr Gan Chin Seng

Updates on Management of Envenomation in Children

Speaker : Dr Yap Hsiao Ling

4:50 PM - 5:05 PM

Q&A

5:05 PM

End of Day 2



11 JULY 2026
SATURDAY

DAY 2

YOUNG
INVESTIGATOR AWARD

CONCURRENT SESSIONS

3:50 PM - 5:00 PM

Oral Presentation - Room 5

Judges :

Professor Lim Swee Han

Professor Dr Sabariah Faizah Binti Jamaluddin

Professor Chang Wei Tien

3:50 PM - 5:00 PM

Poster Presentation - Conference Foyer

Judges :

Associate Professor Gene Ong Yong-Kwang

Professor Dr Shaik Farid Abdull Wahab

Professor Dr Muhammad Maaya

5:00 PM

End of Day 2



12 JULY 2026
SUNDAY

DAY 3

MAIN HALL

CONFERENCE PROGRAMME

8:30 AM - 9:00 AM

Plenary 17

Simulation Training in Resuscitation: The Impact, Effectiveness and Future Outlook

Speaker : Professor Dr Ismail Mohd Saiboon

9:00 AM - 9:30 AM

Plenary 18

Updates in First Aid: Skills to Preserve Life

Speaker : Dr Kwanhathai Darin Wong

9:30 AM - 10:00 AM

Tea & Booth Exhibition Visit

10:00 AM - 11:00 AM

Symposium 5 - Trauma

Traumatic Out of Hospital Cardiac Arrest :
Current Recommendation

Speaker : Professor Dr Sabariah Faizah Binti Jamaluddin

Updated Guideline and Standard Management in Major Trauma

Speaker : Dr Shah Jahan Bin Mohd Yussof

The 'Golden Hour': Redefining The Window for Pre-Hospital
Critical Intervention

Speaker : Dr Mohd Fahmi Bin Mohd Abdul Kader Jailani

11:00 AM - 11:15 AM

Q&A

11:15 PM - 11:45 PM

Plenary 19

Recent Updates in Stroke Management

Speaker : Dr Chow Chee Toong

11:45 AM - 12:15 PM

Closing Ceremony

12:15 PM

Lunch & End of Conference



LECTURE SUMMARY



PROFESSOR PETER MORLEY



DIRECTOR MEDICAL EDUCATION, SENIOR SPECIALIST INTENSIVE CARE



ROYAL MELBOURNE HOSPITAL CLINICAL SCHOOL, UNIVERSITY OF MELBOURNE



PLENARY 1

OVERVIEW OF ILCOR 2025

PLENARY 9

**MATERNAL RESUSCITATION & RESUSCITATION IN
OTHER SPECIAL CIRCUMSTANCES**

SUMMARY OF LEARNING OBJECTIVES

Plenary 1 : Overview of ILCOR 2025

- Understand the methodology used by ILCOR to assess resuscitation evidence and formulate treatment recommendations
- List areas where the 2025 CoSTR recommendations differ from previous guidance
- Identify opportunities and challenges for implementing the 2025 CoSTR recommendations within local resuscitation guidelines and healthcare settings

Plenary 9 : Maternal resuscitation & resuscitation in other special circumstances

- Identify common special circumstances associated with cardiac arrest and describe how these conditions influence resuscitation priorities and management strategies
- Recognise the physiological and anatomical changes of pregnancy that affect the assessment and treatment of maternal cardiac arrest.
- Discuss the role, timing, and indications for resuscitative (perimortem) caesarean delivery as part of maternal cardiac arrest management.



LECTURE SUMMARY



PROFESSOR LIM SWEE HAN



SENIOR CONSULTANT



SINGAPORE GENERAL HOSPITAL



PLENARY 2

BASIC LIFE SUPPORT RESUSCITATION UPDATES

SUMMARY OF LEARNING OBJECTIVES

- 1.To present 2021 SRFAC Adult BCLS guidelines
- 2.To present 2021 SRFAC CPR (Hands-only) + AED guidelines
- 3.Discuss the difference between children, infant and adult BCLS
- 4.What are the likely updates in the 2026 SRFAC BCLS+AED and CPR (Hands-only) +AED only guidelines
- 5.Discuss the difference between SRFAC, AHA, ERC BCLS guidelines and the importance of having national resuscitation and first aid guidelines



LECTURE SUMMARY



PROFESSOR JERRY NOLAN



CONSULTANT IN ANAESTHESIA AND INTENSIVE CARE MEDICINE



ROYAL UNITED HOSPITAL, BATH UK



PLENARY 3

ACLS UPDATES

PLENARY 10

POST RESUSCITATION CARE UPDATES

SUMMARY OF LEARNING OBJECTIVES

Plenary 3 : ACLS Updates

The International Liaison Committee on Resuscitation (ILCOR) published its consensus on CPR Science with Treatment Recommendations in October 2025 and these underpinned the 2025 ERC advanced life support (ALS) Guidelines and AHA ACLS Guidelines. This presentation will summarise the 2025 ERC Algorithm and then provide in depth focus on airway management, defibrillation strategy, intravascular access, drugs, physiologically-guided ALS and extracorporeal CPR.

Plenary 10 : Post-Resuscitation Care Updates

The 2025 ERC post-resuscitation care guidelines will be summarised but the focus of the presentation will be on several hot topics: indications for urgent coronary angiography, whole-body CT, oxygen and ventilation targets, mean arterial pressure targets, temperature control, and neurological prognostication.



LECTURE SUMMARY



PROFESSOR SUNG PHIL CHUNG



**PROFESSOR, EMERGENCY MEDICINE, YONSEI UNIVERSITY COLLEGE OF MEDICINE, KOREA
CHAIR, RESUSCITATION COUNCIL OF ASIA (RCA)**



YONSEI UNIVERSITY, GANGNAM SEVERANCE HOSPITAL, SEOUL, KOREA



PLENARY 4

RESUSCITATION COUNCIL OF ASIA (RCA)

SUMMARY OF LEARNING OBJECTIVES

The Resuscitation Council of Asia (RCA), a member council of the International Liaison Committee on Resuscitation (ILCOR), is a collaborative network comprising eight national resuscitation organizations across Asia. Currently, its active members include Hong Kong, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand. This year, the RCA celebrates its 21st anniversary, marking over two decades of advancing resuscitation science in the region.

According to ILCOR reports, OHCA characteristics in Asia exhibit specific variations compared to other continents. Notably, Asia shows lower survival rates among EMS-treated OHCA patients, a lower prevalence of shockable rhythms, lower rates of prehospital epinephrine administration, and shorter EMS scene times. Conversely, bystander CPR rates, ambulance response times, and survival rates for patients with bystander-witnessed shockable rhythms are comparable to those observed in other regions. These disparities stem from fundamental differences in emergency medical systems. For example, several Asian countries provide BLS only and do not legally permit prehospital death declaration or the termination of resuscitation by EMS personnel.

Given the diverse languages, cultures, and EMS infrastructures across Asia, implementing a single, uniform guideline poses significant challenges. Consequently, each member country develops and operates localized resuscitation guidelines and CPR training programs tailored to its specific healthcare ecosystem. Through continuous prehospital initiatives, policy implementations, and legislative efforts by the RCA member councils, regional cardiac arrest survival rates have demonstrated a steady upward trend, despite temporary setbacks experienced during the COVID-19 pandemic.

Nevertheless, addressing regional disparities in survival rates remains a critical challenge. Additionally, accelerating population aging presents further hurdles to achieving substantial gains in survival outcomes. Moving forward, the RCA remains committed to collaborating closely with ILCOR to improve cardiac arrest survival rates across the Asian region.



LECTURE SUMMARY



ASSOCIATE PROFESSOR GENE ONG YONG-KWANG



SENIOR CONSULTANT



KK WOMEN'S & CHILDREN'S HOSPITAL, SINGAPORE



PLENARY 5

UPDATES IN PAEDIATRIC RESUSCITATION GUIDELINES

SUMMARY OF LEARNING OBJECTIVES

This plenary session provides a comprehensive critical appraisal of the latest advancements and evolving paradigms in paediatric life support. The session will examine the most recent clinical updates to paediatric resuscitation guidelines, evaluating the underlying physiological rationale and evidence base driving these changes.

A central component of the session involves a comparative analysis of major international resuscitation council frameworks and regional adaptations. Delegates will explore key operational differences, practice variations, and the specific clinical implications of these discrepancies across diverse healthcare environments.

The presentation addresses existing knowledge gaps that challenge paediatric resuscitation outcomes, highlighting the unique uncertainties faced by frontline multidisciplinary teams in both high-resource and developing healthcare systems.

Finally, this plenary looks ahead to future directions in the field. It highlights critical priorities for robust data collection and targeted research necessary to inform future paediatric life support guidelines.



LECTURE SUMMARY



DR LEONG YUEN CHIN



EMERGENCY PHYSICIAN, AREA OF INTEREST IN PRE HOSPITAL CARE AND DISASTER MEDICINE



EMERGENCY AND TRAUMA DEPARTMENT, HOSPITAL SUNGAI BULOH



PLENARY 6

PENANG PRE-HOSPITAL CARE MECC COORDINATION

SUMMARY OF LEARNING OBJECTIVES

This plenary session explores the digital transformation of Penang's Pre Hospital Care Medical Emergency Coordination Centre (MECC) through the innovative myPHC system. Built on the "Keep It Simple, Stupid" (K.I.S.S.) philosophy, myPHC was developed by clinicians to provide a scalable, customizable, and low-cost digital dispatch platform. The presentation traces the system's evolution from a basic prototype replacing handwritten logs and chat apps, to myPHC 2.0—a comprehensive suite featuring real-time analytics, auto-dispatch, and dedicated interfaces for call-takers, dispatchers, and responders. Having managed over 247,000 cases between 2021 and 2025, the system effectively embeds clinical protocols, such as Stroke, ACS, and Trauma directly into the dispatch workflow to improve data accuracy and response efficiency.

By the end of this session, attendees will be able to:

- **Understand Digital Transition:** Recognize the steps required to transition pre hospital care from traditional handwritten inputs to a fully functional digital ecosystem.
- **Evaluate System Design:** Analyze the benefits of a locally developed, customizable dispatch platform that integrates clinical protocols and real-time geolocation tracking.
- **Leverage Data Analytics:** Identify how real-time dashboards and accurate data entry (avoiding "Garbage In, Garbage Out") drive operational efficiency and daily KPI achievements.
- **Anticipate Future Innovations:** Discuss the future integration of Artificial Intelligence (AI) and comprehensive electronic Patient Care Record (ePCR) systems in the upcoming myPHC 3.0.



LECTURE SUMMARY



PROFESSOR HELEN LILEY



SENIOR STAFF SPECIALIST – MATER MOTHERS' HOSPITAL
HONORARY SENIOR FELLOW - MATER RESEARCH
PROFESSOR - FACULTY OF MEDICINE, THE UNIVERSITY OF QUEENSLAND



THE UNIVERSITY OF QUEENSLAND



PLENARY 8

**NEONATAL RESUSCITATION:
TRANSLATING EVIDENCE INTO BETTER
OUTCOMES**

PLENARY 15

**ADVANCES IN NEONATAL TRANSFUSION
AND HAEMOSTATIC CARE**

SUMMARY OF LEARNING OBJECTIVES

Plenary 8 : Neonatal Resuscitation: Translating evidence into outcomes

There are numerous steps involved in ensuring that all infants receive contemporary, evidence-based care. These include the rigorous appraisal of evidence and development of guidelines. Application of guidelines requires systems for education and training of both novice and experienced practitioners. Successful neonatal resuscitation, especially advanced resuscitation requires more than just individual skills. It is a complex and potentially stressful task, best accomplished by multidisciplinary team members who have a shared mental model of what to do and how to support each other through teamwork. Activities that can support good teamwork include specific training in non-technical teamwork skills, training and practice as multi-disciplinary teams, and briefing before and debriefing after resuscitation events.

Despite all these measures, implementation of guidelines is not inevitable, and practice change can take time to accomplish. Ideally, population-based databases and registries collect information about adherence to contemporary guidelines in important areas of clinical practice such as neonatal resuscitation. This not only ensures that we identify gaps in education and implementation, but also allows us to determine if there are unforeseen consequences of clinical practice change.

Plenary 15 : Advances in Neonatal Transfusion and Haemostatic Care

Newborns who need neonatal intensive care are among the most frequent recipients of transfusions of red cells and other blood products, and yet numerous studies have found a relationship, not entirely explained by severity of illness, between exposure to transfusion and various adverse outcomes. Hence, strategies to reduce need for transfusion may improve outcomes, and reduce wastage of blood products. Optimizing strategies for umbilical cord management can reduce transfusion requirements in preterm infants (and reduce mortality) and prevent iron deficiency and anemia in term infants. Strategies to reduce unnecessary phlebotomy and support nutrition also play a key role. Evidence suggests that exposure to adult Hb increases risk of retinopathy of prematurity, so new research is exploring whether umbilical cord blood may be a better source of red cells for preterm infants than blood from adult donors. Coagulopathy is also common in NICU patients, and can manifest as intraventricular, pulmonary or other critical bleeding. Certain prophylactic treatments, such as vitamin K and for infants with Neonatal alloimmune thrombocytopenia, IV immunoglobulin have a good evidence base. A critical bleeding protocol may also improve survival and outcomes.



LECTURE SUMMARY



PROFESSOR CHANG WEI TIEN



CHAIR



**1. DEPARTMENT OF EMERGENCY MEDICINE, NATIONAL TAIWAN UNIVERSITY
HOSPITAL AND COLLEGE OF MEDICINE, TAIPEI, TAIWAN**

2. TAIWAN SOCIETY OF EMERGENCY AND CRITICAL CARE MEDICINE (TSECCM)



PLENARY 11

ACUTE CORONARY SYNDROMES UPDATE

SUMMARY OF LEARNING OBJECTIVES

Acute coronary syndrome (ACS) is an important cardiovascular emergency in the modern societies. ACS not only leads to myocardial ischemia/infarction, but is often associated with cardiac arrhythmia, hemodynamic instability, or even cardiovascular collapse. This talk will introduce the regional systems of care focusing on the prehospital and ER diagnosis and management. Search for medical help via EMS is encouraged, though initial assessment by local medical doctors is frequent. Antiplatelet therapy starting from Aspirin has been advanced from EMS to first aid level whenever available if ACS is highly suspected. On the other hand, administration of oxygen has been restricted to conditions such as hypoxemia (oxygen saturation < 90%) given the potential vasoconstrictive effect with reduced coronary blood flow and oxidative injury upon recanalization in this era of reperfusion. Electrocardiogram (ECG) plays a key role in the diagnosis of ST elevation myocardial infarction (STEMI) and has been increasingly popular in the prehospital settings, based on which revascularization strategy could be planned. Primary percutaneous coronary intervention (PCI) is the first priority with the goal of first medical contact (FMC) to device activation < 90 min or < 120 min if hospital transfer is required. In patients with ACS and cardiogenic shock or hemodynamic instability, emergency revascularization by PCI or CABG is indicated irrespective of time from symptom onset. If the patient presents with STEMI 12-24h after symptom onset, or > 24h with ongoing ischemia or life-threatening arrhythmia, primary PCI is reasonable to improve clinical outcomes. In NSTEMI-ACS, immediate invasive strategy is indicated if the patient has refractory ischemia or hemodynamic/electrical instability. Early invasive strategy (<24h) is reasonable in NSTEMI-ACS patients at high risk of ischemic events. For patients with STEMI and refractory cardiogenic shock, or ACS with mechanical complications, use of mechanical support devices is reasonable. Patients with cardiac arrest (CA) and STEMI should preferentially be transferred by EMS to PPCI-capable centers. Primary PCI is indicated to improved survival, especially in those who are non-comatose or comatose with favorable prognostic features. In CA patients without ST elevation on ECG, immediate angiography is not recommended if the patient is hemodynamically and electrically stable. In summary, multi-disciplinary cooperation with establishment of the regional systems of care, together with high-quality medical care, follow-up and rehabilitation, is the key to further improve the overall outcomes of the patients with ACS.



LECTURE SUMMARY



DR ISMAIL TAN BIN MOHD ALI TAN



CONSULTANT ANAESTHESIOLOGIST AND INTENSIVIST



HOSPITAL KUALA LUMPUR



PLENARY 12

**ETHICAL ISSUES IN RESUSCITATION:
FAMILY PRESENCE DURING
RESUSCITATION**

SYMPOSIUM 1 – NEW FRONTIER IN RESUSCITATION

**NEW MONITORING STRATEGIES DURING
RESUSCITATION**

SUMMARY OF LEARNING OBJECTIVES

Plenary 12 : Ethical Issues In Resuscitation : Family Presence During Resuscitation

There is need for paradigm shift in resuscitation care from historical exclusionary practices to a model of structured, family-centred inclusion. Following this talk, the audience will be able to define Family Presence During Resuscitation (FPDR) and articulate how major international guidelines—including those from the AHA, ERC and RCUK, now advocate for offering families the option to be present during resuscitative efforts when safe.

A central point is the ability to critically appraise the evidences debunking long-held clinical myths that rather than causing trauma or clinical disruption, FPDR significantly reduces post-traumatic stress disorder, anxiety, and complicated grief in family members without compromising CPR quality, prolonging procedures, or increasing medicolegal risks.

Furthermore, the audience will comprehend the operational requirements for safe FPDR implementation. This includes recognizing the critical necessity of a family facilitator who provides real-time narration and emotional support, thereby mitigating physician performance anxiety and preventing team distraction.

Symposium 1 : New Monitoring Strategies During Resuscitation

This lecture highlights a shift in emergency cardiovascular care, moving away from standardized, protocol-driven "blind compressions" toward a holistic approach known as precision CPR. The objective is to equip resuscitation professionals with a comprehensive understanding of how to implement data-driven, ethically sound, and technologically advanced frameworks to maximize neurologically intact survival.

A core focus of this session is the application of Precision physiology, which transitions teams from mechanical CPR targets to individualized perfusion goals using real-time hemodynamic feedback, including Diastolic Blood Pressure (DBP), End-Tidal CO₂ (ETCO₂), and Cerebral Oximetry (NIRS).

Beyond physiology, modern resuscitation demands careful navigation of ethical principles and the adoption of emerging technologies. We will discuss integrating patient autonomy and proportionality into high-stakes environments, safely supporting family presence, and mitigating provider moral distress through structured clinical debriefings. Ultimately, this session provides a closed-loop framework ensuring every intervention is guided by measurable physiology, framed by compassion, and optimized by intelligent technology.



LECTURE SUMMARY



PROFESSOR MARCUS ONG ENG HOCK



SENIOR CONSULTANT AND PROFESSOR



**DEPT OF EMERGENCY MEDICINE, SINGAPORE GENERAL HOSPITAL
HEALTH SERVICES RESEARCH AND POPULATION HEALTH, DUKE NUS MEDICAL SCHOOL**



PLENARY 13

EMPOWERING COMMUNITY FIRST RESPONDERS: STRATEGIES FOR IMPROVING BYSTANDER CPR RATES AND THE PUBLIC'S WILLINGNESS AND ABILITY TO USE AEDS

SYMPOSIUM 2 -

PRE-HOSPITAL CARE

DATA SCIENCE APPLICATION IN PRE-HOSPITAL CARE

SUMMARY OF LEARNING OBJECTIVES

Plenary 13 : Empowering Community First Responders: Strategies for improving bystander CPR rates and the public's willingness and ability to use AEDs

It takes a System to Save a Life. Cardiac Arrest is a time sensitive condition and early Cardio-Pulmonary Resuscitation and use of Automated External Defibrillators is only possible with involvement of bystanders and community first responders. In this talk, we will:

- Understand the Framework of Survival for OHCA and Community Response
- Link to the Global Resuscitation Alliance 10 Steps to Improve Survival
- Learn strategies to improve bystander CPR rates and AEDs use
- Case studies from Singapore

Symposium 2 : Data Science Applications in Prehospital Emergency Care

In this talk we will review how data and data science can be used to drive improvement in health systems. This will include the following objectives:

- Understand the role of Data and Data Science in the Learning Health System
- What is needed to build an ecosystem for Data Science
- Examples and Case Studies from Singapore



LECTURE SUMMARY



ASSOCIATE PROFESSOR DR SARAH BINTI SHAIK ABDUL KARIM



ASSOCIATE PROFESSOR IN EMERGENCY MEDICINE



INTERNATIONAL MEDICAL SCHOOL, MANAGEMENT AND SCIENCE UNIVERSITY



PLENARY 14

INTEGRATED PUBLIC PRIVATE COLLABORATION IN EMERGENCY MEDICAL SERVICES FOR MASS GATHERING EVENTS : THE KEY ASPECTS TO STRENGTHENING BOTH SECTORS

SUMMARY OF LEARNING OBJECTIVES

Integrated Public Private Collaboration in Emergency Medical Services for Mass Gathering Events: The Key aspects to strengthening both sectors.

Malaysia has gained traction in hosting many mass gathering events of local and international level. Events such as marathons, triathlons, cycling and motorsports has brought together many participants and spectators from around the world. In such events the events medicine coverage if left to a single organization may exhaust its resources. Although resources in Ministry of Health or government when combined can cater for such events, there are limitations in government management of such events as outlined in our Medical Coverage policy and guidelines 2017.

Thus, there is a need for us to have collaboration between government and private sector in managing such events capitalizing on each of our strength. In this topic we shall discuss the various partnerships between government and private in managing mass gathering events. The focus is on the how and its sustainability to be adopted in future policies.



LECTURE SUMMARY



DR HASRI SAMION



SENIOR CONSULTANT PEDIATRIC CARDIOLOGIST



INSTITUT JANTUNG NEGARA'S PAEDIATRIC AND CONGENITAL HEART CENTRE



PLENARY 16

ADVANCES IN THE MANAGEMENT OF LIFE THREATENING ARRHYTHMIAS IN CHILDREN

SUMMARY OF LEARNING OBJECTIVES

Life-threatening pediatric arrhythmias include sustained supraventricular tachycardia (SVT), ventricular tachycardia/fibrillation (VT/VF), severe bradyarrhythmias, atrioventricular (AV) block, and inherited channelopathies such as long QT syndrome. These may occur in structurally normal hearts or in association with congenital heart disease, cardiomyopathy, myocarditis, or genetic disorders. Recent advances have improved diagnosis through extended ECG monitoring, wearable devices, genetic testing, and sophisticated electrophysiological studies using 3D electro-anatomic mapping. These tools enable earlier detection, better risk stratification, and more precise localization of arrhythmia sources.

Acute management emphasizes rapid stabilization, correction of reversible causes, and adherence to pediatric advanced life support protocols. Adenosine remains first-line therapy for SVT, while unstable arrhythmias require cardioversion or defibrillation. Severe bradycardia and high-grade AV block may require temporary pacing.

Long-term treatment has evolved with genotype-guided therapy. Beta-blockers are first-line agents for many inherited arrhythmias, while drugs such as flecainide, sotalol, and amiodarone are used selectively with careful monitoring. Intra-left ventricular synchrony pacing (LV apical or Left bundle branch pacing) are options to prevent long term pacemaker induced-induced cardiomyopathy.

Current catheter ablation represents a major advance, offering high success rates and low complication risks for recurrent/sustained SVT and selected ventricular arrhythmias.



LECTURE SUMMARY



PROFESSOR DR ISMAIL BIN MOHD SAIBOON



**PROFESSOR AND SENIOR EMERGENCY PHYSICIAN CONSULTANT
SIMULATION EDUCATOR**



**DEPARTMENT OF EMERGENCY MEDICINE,
FACULTY OF MEDICINE, HOSPITAL CANSELOR TUNKU MUHRIZ,
UNIVERSITI KEBANGSAAN MALAYSIA**



PLENARY 17

**SIMULATION TRAINING IN RESUSCITATION: THE IMPACT, EFFECTIVENESS AND FUTURE
OUTLOOK**

SUMMARY OF LEARNING OBJECTIVES

Introduction

Simulation-based resuscitation training (SBRT) has emerged as a transformative approach in medical education, bridging the gap between theory and practice. By recreating high-stakes clinical scenarios in a safe environment, simulation empowers learners to refine technical skills, enhance decision-making, and build confidence without compromising patient safety. Its impact is evident in improved performance, teamwork, and long-term retention of critical skills. As healthcare evolves, simulation continues to expand in scope, offering diverse modalities and innovative strategies that shape the future of resuscitation education. Simulation-based resuscitation training is delivered through three main phases or component, which are Pre-briefing, Simulation Activities and Debriefing. Each of these phases is very pertinent in the success of any SBRT program. In this presentation we are going to explore the key features SBRT, the various modalities used for delivery and how to match them in achieving the greatest impact or results. We also going to share some of the evidence that shows the effectiveness of SBRT. Finally, we going to discuss some of the latest technology that have been incorporated in the SBRT currently and what the future holds for SBRT.

Learning Objectives

At the end of this presentation, participants will be able to:

- Describe various training modalities simulation offers for resuscitation education.
- Match specific modalities with training objectives to maximize learning impact.
- Describe the importance of debriefing in simulation-based training for resuscitation.
- Analyze effectiveness data and explore the future landscape of resuscitation training.



LECTURE SUMMARY



DR KWANHATHAI DARIN WONG



CONSULTANT EMERGENCY PHYSICIAN



HOSPITAL SHAH ALAM



PLENARY 18

UPDATES IN FIRST AID: SKILLS TO PRESERVE LIFE

SUMMARY OF LEARNING OBJECTIVES

1. Know the updates of Guidelines 2025 on First Aid
2. Understand Guidelines 2025 on First Aid
3. Use the ABCDE approach to identify and treat threats to life quickly
4. Key Message in Life threatening bleeding is to use an escalating approach with manual direct pressure and thereafter haemostatic dressing and /or tourniquets
5. Key Message in Foreign body airway obstruction is to use an escalating approach with cough, back blows and abdominal thrusts
6. Key Message in Drowning is to offer floatation aid, remove from water and provide first aid as needed, including avoiding hypothermia
7. Key Message in First Aid courses is to tailor the course to empower equity and focus on participants and settings



LECTURE SUMMARY



DR CHOW CHEE TOONG



EMERGENCY PHYSICIAN



HOSPITAL SEBERANG JAYA



PLENARY 19

RECENT UPDATES IN STROKE MANAGEMENT

SUMMARY OF LEARNING OBJECTIVES

This high-yield session delivers a critical synthesis of the landmark 2026 AHA/ASA Guidelines for the Early Management of Acute Ischemic Stroke, translating complex updates directly into emergency resuscitation practice. Designed for frontline clinicians and resuscitation specialists, this talk explores the optimization of prehospital systems of care—including Mobile Stroke Units (MSUs) and direct-to-thrombectomy EMS routing algorithms. Attendees will examine the clinical shift from Alteplase to Tenecteplase (TNK) and analyze imaging-driven strategies that extend thrombolytic and endovascular thrombectomy (EVT) windows up to 24 hours (specifically for large core and basilar artery occlusions). Finally, the session will address post-reperfusion critical care, clarifying why aggressive physiologic targets (such as intensive blood pressure lowering) may cause harm.



LECTURE SUMMARY



DATUK DR ALZAMANI MOHAMMAD IDROSE



CONSULTANT AND HEAD



EMERGENCY DEPARTMENT, HOSPITAL KUALA LUMPUR



SYMPOSIUM 1 – NEW FRONTIER IN RESUSCITATION

EXTRACORPOREAL CPR (ECPR) IN THE FIELD AND ECMO TECHNOLOGY IN HOSPITAL SETTING: NEWS UPDATES, FEASIBILITY, ETHICAL ISSUES AND OUTCOME

SUMMARY OF LEARNING OBJECTIVES

Conventional cardiopulmonary resuscitation (CPR) remains the cornerstone of cardiac arrest management but generates only approximately 20–30% of normal cardiac output, limiting cerebral and systemic perfusion during prolonged resuscitation. Extracorporeal cardiopulmonary resuscitation (ECPR), achieved using veno-arterial extracorporeal membrane oxygenation (VA-ECMO), offers an advanced rescue strategy by restoring near-normal circulation while reversible causes of cardiac arrest are treated.

This presentation reviews contemporary evidence on ECMO and ECPR, explains the physiological principles underlying extracorporeal life support, and compares conventional CPR with ECPR. Major clinical trials, including ARREST, Prague OHCA and INCEPTION, will be critically appraised to identify which patients benefit most and why system organisation is as important as technology itself. Current definitions of refractory cardiac arrest, patient selection criteria, and evolving international recommendations will also be discussed.

The session examines practical implementation of hospital ECMO programmes and prehospital (field) ECPR, highlighting the infrastructure, workforce, logistics, costs and training required for successful deployment. Experiences from leading international programmes in France, Japan, South Korea, Taiwan and Germany will illustrate different models of care and recent technological innovations.

Beyond technology, the presentation explores ethical dilemmas surrounding resource allocation, patient selection, equity of access, futility, and long-term neurological outcomes. Finally, the feasibility of introducing ECPR in Asian healthcare systems will be critically evaluated. The key message is that successful ECPR depends not merely on ECMO availability, but on high-quality CPR, efficient emergency medical services, rapid transport, experienced multidisciplinary teams, and a mature regional cardiac arrest system capable of delivering timely, coordinated care.



LECTURE SUMMARY



DR MOHD FAHMI BIN MOHD ABDUL KADER JAILANI



EMERGENCY PHYSICIAN (AOI IN PRE-HOSPITAL CARE & DISASTER MEDICINE)



HOSPITAL SEBERANG JAYA, PENANG, MALAYSIA.



SYMPOSIUM 1 – NEW FRONTIER IN RESUSCITATION

ARTIFICIAL INTELLIGENCE AND TELEMEDICINE :
REVOLUTIONIZING PRE-HOSPITAL TRIAGE AND
CARE CONSULTATION

SYMPOSIUM 5 – TRAUMA

THE 'GOLDEN HOUR': REDEFINING
THE WINDOW FOR PRE-HOSPITAL
CRITICAL INTERVENTION

SUMMARY OF LEARNING OBJECTIVES

Symposium 1 : Artificial Intelligence & Telemedicine: Revolutionizing Pre-Hospital Triage & Care

Artificial intelligence (AI) and telemedicine are rapidly transforming the delivery of pre-hospital emergency care by enabling faster clinical decision-making, improving triage accuracy, and enhancing access to specialist support before patients reach the hospital. As Emergency Medical Services (EMS) evolve, these technologies have the potential to strengthen patient safety, optimize resource utilization, and improve outcomes for time-critical conditions.

This session explores the current and emerging applications of AI and telemedicine in pre-hospital care, including AI-assisted triage, clinical decision support, predictive analytics, remote specialist consultation, and digital communication platforms. Real-world examples and local innovations will illustrate how these technologies can support paramedics and emergency physicians in making timely, evidence-based decisions while improving coordination between ambulance services and receiving hospitals.

The session will also discuss the opportunities and challenges of implementing AI within EMS, including governance, data quality, ethics, cybersecurity, workforce readiness, and maintaining the essential role of clinical judgement. Participants will gain practical insights into how digital innovation can complement and not replace the healthcare professionals and contribute to a more connected, efficient, and patient-centered EMS system.

Symposium 5 : The 'Golden Hour': Redefining the Window for Pre-Hospital Critical Intervention

The traditional concept of the "Golden Hour" has long influenced trauma care, emphasizing rapid transport to definitive care. However, advances in pre-hospital medicine, evidence-based resuscitation, critical care transport, and digital health technologies have shifted the focus from simply reaching the hospital quickly to delivering the right intervention at the right time.

This session will examine the evolution of the Golden Hour concept and discuss how modern Emergency Medical Services (EMS) optimize patient outcomes through early recognition, timely life-saving interventions, appropriate triage, and destination planning. Participants will explore current evidence surrounding time-critical conditions, including major trauma, stroke, STEMI, sepsis, and cardiac arrest, while recognizing that not every patient benefits from a "scoop and run" approach.

The session will also highlight how technologies such as artificial intelligence, telemedicine, electronic decision support, and real-time data systems are transforming pre-hospital decision-making and resource deployment. By integrating clinical judgement with system innovation, EMS providers can improve patient outcomes beyond traditional time-based metrics.



LECTURE SUMMARY



DR MOHD AFIQ BIN MOHD NOR



EMERGENCY PHYSICIAN CONSULTANT



UNIVERSITI MALAYA MEDICAL CENTRE



SYMPOSIUM 2 – PRE-HOSPITAL CARE

MYRES-Q: UNITING HEARTSAVERS AND AEDS FOR A HEARTSAFE MALAYSIA

SUMMARY OF LEARNING OBJECTIVES

Out-of-hospital cardiac arrest (OHCA) remains one of the leading causes of preventable death worldwide. Although advances in Emergency Medical Services (EMS) have improved patient care, survival continues to depend largely on actions taken by nearby bystanders during the first few critical minutes before ambulance arrival. The interval between collapse and EMS response remains a significant challenge in many countries, including Malaysia.

This session explores how digital technology can bridge this gap by connecting CPR-trained community responders with nearby cardiac arrest victims and accessible automated external defibrillators (AEDs). Using the MyResQ mobile application as a Malaysian case study, the presentation demonstrates how citizen responder activation, AED mapping, and integration with existing emergency response systems can strengthen the Chain of Survival and improve community preparedness.

The session will review international evidence supporting smartphone-based responder systems, highlighting their impact on response times, bystander CPR, AED utilisation, neurological outcomes, and survival. It will also present Malaysia's ongoing journey towards establishing a Heartsafe Nation through community engagement, CPR education, AED registration, research, and strategic collaboration with emergency medical services.

Learning Objectives

At the end of this session, participants should be able to:

1. Describe current challenges affecting survival from out-of-hospital cardiac arrest in Malaysia.
2. Explain the role of smartphone-based citizen responder systems in strengthening the Chain of Survival.
3. Review international evidence supporting technology-enabled community response to OHCA.
4. Discuss how integrated digital ecosystems involving EMS, citizen responders, and AED networks can contribute towards building a Heartsafe Malaysia.



LECTURE SUMMARY



DR LEONG YUEN CHIN



EMERGENCY PHYSICIAN, AREA OF INTEREST IN PRE HOSPITAL CARE
AND DISASTER MEDICINE



EMERGENCY AND TRAUMA DEPARTMENT, HOSPITAL SUNGAI BULOH



SYMPOSIUM 2 – PRE-HOSPITAL CARE

NG MERS 999 : THE REVOLUTION OF THE MALAYSIAN EMS SYSTEM

SUMMARY OF LEARNING OBJECTIVES

This presentation outlines the transformative, yet challenging, journey of modernizing Malaysia's emergency response through the Next Generation Malaysian Emergency Response System 999 (NG MERS 999) system. Moving beyond legacy voice-only capabilities, NG MERS 999 introduces a comprehensive multimedia ecosystem featuring the SaveME mobile app, IoT integration, and map-centric auto-dispatch protocols. The session provides a transparent review of the system's architecture, alongside a candid analysis of the November 2025 Go-Live phase. It details the critical systemic failures—such as application crashes, geolocation inaccuracies, and system outages—that necessitated a strategic fallback to the previous system, offering vital lessons in national healthcare technology deployment.

By the end of this session, attendees will be able to:

- **Understand the Architectural Shift:** Compare the traditional MERS 999 system with the NG MERS 999 ecosystem, specifically the incorporation of multimedia inputs (video, live chat, pictures) and sensor data.
- **Explore Dispatch Modernization:** Analyze the integration of the Advanced Medical Priority Dispatch System (MPDS) and new map-centric Computer Aided Dispatch (CAD) for automated resource allocation.
- **Evaluate Real-World Rollout Challenges:** Examine the root causes of the November 2025 rollout failures, including system crashes, application lagging, and incorrect data routing.
- **Assess Systemic Resilience:** Recognize the critical role of Business Continuity Planning (BCP) and fail-safes when implementing large-scale emergency communication networks.



LECTURE SUMMARY



PROFESSOR DR SHAIK FARID ABDULL WAHAB



DEPUTY DIRECTOR & SENIOR CONSULTANT EMERGENCY PHYSICIAN



HOSPITAL SULTAN ZAINAL ABIDIN (HOSZA)



SYMPOSIUM 2 – PRE-HOSPITAL CARE

CURRENT INDICATION AND FUTURE PERSPECTIVE FOR POINT OF CARE ULTRASOUND (POCUS) IN RESUSCITATION FOR DIAGNOSIS IN PHC

SUMMARY OF LEARNING OBJECTIVES

Pre Hospital Ultrasound (PHUS) : the current indications, clinical applications, and future perspectives of Point-of-Care Ultrasound (POCUS) in prehospital and primary healthcare settings, particularly in the assessment and management of critically ill and injured patients. Participants should be able to describe how POCUS supports rapid decision-making within the ABCDE approach, including evaluation of airway, breathing, circulation, disability, and exposure in time-critical situations, and appreciate its role in identifying shock states, respiratory emergencies, trauma-related injuries, and reversible causes of cardiac arrest using focused protocols such as RUSH, eFAST, and focused cardiac ultrasound. Furthermore, learners will understand the importance of translating ultrasound findings into immediate clinical actions involving treatment priorities, transport decisions, and destination planning, while recognising the current limitations in outcome evidence and the need for future research. The lecture also aims to develop awareness of the educational, governance, and implementation requirements necessary for safe and effective POCUS integration, including competency-based training, supervised practice, quality assurance, curriculum design, and the limitation/barriers of the POCUS.



LECTURE SUMMARY



DR PAULINE CHOO POH LING



CONSULTANT PAEDIATRICIAN AND NEONATOLOGIST



HOSPITAL TUANKU JA'AFAR, SEREMBAN



SYMPOSIUM 3 – ADVANCING EXCELLENCE IN NEONATAL CARE

EARLY MANAGEMENT OF NEONATAL HIE: BEST PRACTICES VS PITFALLS

SUMMARY OF LEARNING OBJECTIVES

Hypoxic-Ischemic Encephalopathy (HIE) is a critical life-threatening neonatal condition caused by systemic hypoxemia and reduced cerebral blood flow during the peripartum period. It remains a leading cause of neonatal mortality and long-term neurodevelopmental disabilities, including cerebral palsy, and cognitive impairments. Therapeutic Hypothermia (TH) remains the mainstay of treatment for moderate to severe HIE currently. However, clinical trials on TH for mild HIE remains mixed even though emerging data indicates that untreated mild cases may suffer subtle, long-term neurodevelopmental impairments.

There are many trials looking into improving the outcome of HIE, however till date no definite evidence of its efficacy. The diagnosis and planned management depends on the severity of the condition, which includes the neurological scoring system and initiation of TH within the '6 hour golden window' after birth. Magnetic resonance imaging (MRI) at an appropriate time is important for prognostification.

Common pitfalls include delay in initiation of TH within the 'six hour golden window' after birth to interrupt the acute inflammatory phase before reperfusion injury, relying on a single marker like umbilical cord pH, Apgar scores or severe metabolic acidosis which is a poor surrogate for actual brain injury and attempting to predict long-term outcomes within the first 72 hours, leading to false reassurance or advice on futility of treatment.

Ultimately, HIE care demands a comprehensive approach combining early clinical staging, continuous amplitude-integrated EEG monitoring, and MRI to accurately map the final outcome.



LECTURE SUMMARY



DR PONG KWAI MENG



CONSULTANT PAEDIATRICIAN/NEONATOLOGIST AND CERTIFIED HEALTHCARE SIMULATION EDUCATOR



PENANG ADVENTIST HOSPITAL, MALAYSIA



SYMPOSIUM 3 – ADVANCING EXCELLENCE IN NEONATAL CARE EMPOWERING NEONATAL TEAMS WITH SIMULATION

SUMMARY OF LEARNING OBJECTIVES

In this talk, the speaker will highlight the growing importance of simulation-based education in strengthening neonatal care delivery, improving team performance, and enhancing patient outcomes. He emphasizes that neonatal emergencies are low-frequency but high-stakes events, where delays or errors can have lifelong consequences. Simulation offers a safe, controlled, and repeatable environment for neonatal teams to practice complex scenarios, refine technical and non-technical skills, and build confidence without risking patient safety.

The presentation explores the core pillars of effective simulation: structured scenario design, psychological safety, inter-professional collaboration, and evidence-based debriefing. He will demonstrate how realistic neonatal simulations—ranging from delivery room resuscitation to transport, communication breakdowns, and human-factors challenges—help teams master critical skills such as airway management, chest compressions, thermoregulation, medication preparation, and crisis leadership.

He also highlights the power of debriefing as the “heart of learning,” allowing participants to reflect on performance, uncover cognitive biases, and develop shared mental models. With an emphasis on team dynamics, the talk shows how simulation enhances situational awareness, communication, and role clarity—essential factors in high-performing neonatal units.

He will conclude the talk by encouraging institutions to invest in sustainable simulation programs, supported by trained simulation educators, quality improvement initiatives, and continuous practice. Empowering neonatal teams through simulation not only improves clinical competence but also cultivates a culture of safety, collaboration, and lifelong learning—ultimately translating into better outcomes for newborns and their families.



LECTURE SUMMARY



DR PON KAH MIN



CONSULTANT PAEDIATRIC INTENSIVIST



HOSPITAL PULAU PINANG



SYMPOSIUM 4 – PAEDIATRIC RESUSCITATION & CRITICAL CARE

EARLY POST CARDIAC ARREST CARE IN CHILDREN: TRANSLATING EVIDENCE INTO BETTER OUTCOMES

SUMMARY OF LEARNING OBJECTIVES

Successful resuscitation from cardiac arrest in children leads to post-cardiac arrest syndrome. Post-cardiac arrest syndrome includes brain injury, myocardial dysfunction, systemic ischemia/reperfusion response, and persistent precipitating pathophysiology. Paediatric post-cardiac arrest care focuses on anticipating, identifying, and treating this complex physiology to improve survival and neurological outcomes. This lecture provides current evidence supporting elements of paediatric post-cardiac arrest care.



LECTURE SUMMARY



DR GAN CHIN SENG



CONSULTANT PAEDIATRIC INTENSIVIST AND PAEDIATRICIAN



SUNWAY MEDICAL CENTRE, SUNWAY CITY



SYMPOSIUM 4 – PAEDIATRIC RESUSCITATION & CRITICAL CARE

SURVIVING PAEDIATRIC SEPSIS- WHAT'S NEW?

SUMMARY OF LEARNING OBJECTIVES

2026 Surviving Sepsis Campaign International Guidelines for the Management of Sepsis and Septic Shock in Children builds on the 2020 pediatric Surviving Sepsis Campaign guideline and provides 61 statements, including new, updated and carried-forward recommendations, while acknowledging that much of paediatric sepsis care remains supported by low-certainty evidence. Dr Gan's talk begins by framing current sepsis terminology, including the 2024 Phoenix Sepsis Criteria, and highlights that Phoenix is useful for defining and risk-stratifying sepsis but should not delay early clinical treatment. Major updates are discussed under five domains: recognition and infection management, haemodynamics and resuscitation, ventilation, adjunctive and immunologic therapies, and long-term follow-up. Key practice messages include stronger support for institutional sepsis performance improvement programmes, routine lactate measurement during initial assessment, time-critical antibiotics for suspected septic shock, and a more nuanced approach to probable sepsis without shock. The presentation also emphasizes ongoing reassessment during fluid resuscitation, cautious aliquot boluses, use of balanced crystalloids, earlier vasoactive support when appropriate, and the practical acceptability of peripheral vasoactive infusion. Newer areas include cardiac and lung point-of-care ultrasound to guide resuscitation, conservative oxygen targets after stabilization in intubated children, fluid accumulation prevention, selective renal replacement strategies, and survivorship-focused rehabilitation and follow-up. Overall, the 2026 guideline reinforces that paediatric sepsis care should be protocolized, physiology-guided, resource-sensitive and adaptable to local systems while preserving clinician judgement, and recognising diverse healthcare capacity across the Asia-Pacific region today widely.



LECTURE SUMMARY



DR YAP HSIAO LING



**CONSULTANT PAEDIATRICIAN
(ADVANCE SPECIALTY IN PAEDIATRIC EMERGENCY MEDICINE)**



HOSPITAL TUNKU AZIZAH



SYMPOSIUM 4 – PAEDIATRIC RESUSCITATION & CRITICAL CARE UPDATES ON MANAGEMENT OF ENVENOMATION IN CHILDREN

SUMMARY OF LEARNING OBJECTIVES

Learning objectives:

1. Pediatric Pathophysiology

- Analyze why children face a higher risk of severe envenomation (e.g., smaller volume of distribution relative to the total mass of injected venom).
- Identify age-specific systemic signs of envenomation in non-verbal or distressed pediatric patients.

2. Implement Evidence-Based First Aid & Pre-Hospital Protocol Updates

- Evaluate current guidelines on the application and pitfalls of Pressure Immobilization Bandages (PIB) based on the specific venom type (e.g., neurotoxic elapids vs. tissue-destructive viperids).
- Deconstruct and discourage outdated, harmful first-aid myths (such as incision, suction devices, tourniquets, or ice).

3. Formulate an Emergency Diagnostic & Monitoring Strategy

- Execute proper monitoring protocols for tracking local wound progression (edema, blistering) and early signs of pediatric compartment syndrome.

4. Optimize Antivenom Administration and Dosing

- Justify why antivenom dosing is not calculated based on a child's weight (the snake injects the same quantity of venom regardless of patient size).
- Outline safe infusion protocols, preparation steps, and thresholds for consulting a clinical toxicologist.

5. Manage Complications and Adverse Reactions

- Anticipate and swiftly treat acute adverse reactions to antivenom (such as anaphylaxis) using pediatric-specific epinephrine and fluid resuscitation guidelines.
- Determine the appropriate criteria for safe pediatric discharge versus transition to a high-dependency or intensive care unit (ICU).



LECTURE SUMMARY



PROFESSOR DR SABARIAH FAIZAH BINTI JAMALUDDIN



**HON. PROFESSOR IN EMERGENCY MEDICINE AND
VISITING CONSULTANT IN EMERGENCY MEDICINE**



**FACULTY OF MEDICINE UITM, AND
HOSPITAL AL SULAN ABDULLAH, UITM**



SYMPOSIUM 5 – TRAUMA

TRAUMATIC OUT OF HOSPITAL CARDIAC ARREST : CURRENT RECOMMENDATION

SUMMARY OF LEARNING OBJECTIVES

Traumatic Cardiac Arrest (TCA) is a distinct entity from medical cardiac arrest, driven by mechanical causes—uncontrolled haemorrhage (48%), tension pneumothorax (13%), hypoxia (13%), and cardiac tamponade (10%). Outcomes depend not on standard CPR alone, but on the immediate, simultaneous treatment of these reversible causes. Presenting rhythms are predominantly PEA (66%) and asystole (30%), with shockable rhythms being rare (4%).

Pre-hospital strategy should adopt a "treat-as-you-go" approach with early pre-alert to the receiving trauma centre. Chest compressions must not delay definitive interventions such as bilateral finger thoracostomy, haemorrhage control, or airway management. Ultrasound (POCUS) plays a critical role in identifying pneumothorax, tamponade, and cardiac activity to guide resuscitation or termination decisions.

Blood products are increasingly preferred over crystalloids for volume resuscitation, and tranexamic acid should be administered early. Resuscitative thoracotomy (RT) is indicated for penetrating chest trauma with signs of life and arrest duration under 15 minutes, but is generally futile in blunt trauma without signs of life. Termination of resuscitation should be considered if no ROSC occurs within 20 minutes after addressing reversible causes, or if no cardiac activity is detected on ultrasound. The guiding principle remains: "Don't pump an empty heart."

System challenges to managing pre-hospital TCA in Malaysia include geographical barriers, EMS variability, time delays, and resource gaps. Overcoming these requires standardised training and improved resources. Time-critical, cause-directed care, rapid transport, and skilled decision-making are the cornerstones of improving survival in pre-hospital TCA.



LECTURE SUMMARY



DR SHAH JAHAN BIN MOHD YUSSOF



**CONSULTANT EMERGENCY AND TRAUMA PHYSICIAN
HEAD OF EMERGENCY DEPARTMENT, HOSPITAL SUNGAI BULOH**



HOSPITAL SUNGAI BULOH



SYMPOSIUM 5 – TRAUMA

UPDATED GUIDELINE AND STANDARD MANAGEMENT IN MAJOR TRAUMA

SUMMARY OF LEARNING OBJECTIVES

This session explores the transformation of emergency trauma services in Malaysia through the integration of global best practices, evidence-based clinical approaches, and system-wide innovation. Participants will gain an understanding of the significant burden of trauma-related mortality, particularly among younger populations, and the need for coordinated strategies to reduce preventable deaths and improve outcomes.

The presentation examines the strategic pillars of trauma service development, including infrastructure design, clinical competency training, and systems development. Participants will learn how purpose-built trauma resuscitation environments, multidisciplinary trauma team models, and damage control resuscitation principles can enhance the delivery of rapid, efficient, and life-saving care.

Key learning areas include the application of the trauma chain of survival, trauma team activation, pre-hospital notification systems, trauma bypass protocols, advanced haemorrhage control, massive transfusion strategies, and streamlined diagnostic pathways. The session also highlights the role of standardized trauma education, subspecialty training programmes, Trauma Life Support Malaysia (TLSM), and national clinical guidelines in strengthening workforce capability and consistency of care.

Participants will further appreciate the importance of trauma registries, quality improvement initiatives, and data-driven decision-making in shaping sustainable trauma systems. International collaborations, benchmarking activities, and regional trauma network development will be discussed as key enablers of continuous service improvement.

By the end of the session, participants will be able to identify practical strategies for advancing trauma care delivery, fostering multidisciplinary collaboration, and supporting national efforts to reduce injury-related morbidity and mortality through a modern, integrated trauma system.



ORAL PRESENTATION FINALIST #1



EE XIN YING SHAYNNA



MEDICAL STUDENT



LEE KONG CHIAN
SCHOOL OF MEDICINE



Every Minute Matters: Is There a Critical Window for Defibrillation After Out-of-Hospital Cardiac Arrest?

#Shaynna Ee¹, #John T. Bokman², Stephanie Fook-Chong³, Nur Shahidah⁴, David Pflug⁵, Benjamin Sieu-Hon Leong⁶, Michael Yih Chong Chia⁷, Desmond Renhao Mao⁸, Wei Ming Ng⁹, *Marcus Eng Hock Ong^{3,4}, *Fahad Javaid Siddiqui³, For the Singapore PAROS Investigators

¹Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore; ²Duke University School of Medicine, Durham, North Carolina, USA; ³Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore; ⁴Department of Emergency Medicine, Singapore General Hospital, Singapore; ⁵Emergency Medical Services Department, Singapore Civil Defence Force, Singapore; ⁶Emergency Medicine Department, National University Hospital, Singapore; ⁷Emergency Department, Tan Tock Seng Hospital, Singapore; ⁸Acute and Emergency Care Centre, Khoo Teck Puat Hospital, Singapore; ⁹Emergency Medicine Department, Ng Teng Fong General Hospital, Singapore.

#co-first authors, *co-last authors

INTRODUCTION

Early defibrillation is critical for good neurological survival after out-of-hospital cardiac arrest (OHCA). The influence of the call-to-defibrillation interval (CTD) on neurologically intact survival (NIS) remains unclear. This study examined the association between CTD and NIS in a nationwide cohort.

METHODS

We analysed adult, witnessed, non-traumatic OHCA cases from the Singapore Pan-Asian Resuscitation Outcomes Study (SG PAROS) between 2015 and 2021, who received prehospital defibrillation. CTD was analysed as a continuous exposure. The primary outcome was NIS (Cerebral Performance Category [CPC] 1–2 at 30 days); secondary outcomes were return of spontaneous circulation (ROSC) and survival to hospital discharge or 30 days. Multivariable logistic regression and restricted cubic spline models were used, adjusting for demographic, arrest, temporal, and prehospital factors.

RESULTS

Among 20,993 OHCA cases, 2,630 met inclusion criteria. Median age was 61 years (IQR 52–72), 81.5% were male, and median CTD was 15.3 minutes (IQR 12.2–20.7). Overall, 12.4% achieved NIS, 46.6% achieved ROSC, and 16.1% survived to hospital discharge or 30 days. Each additional minute of CTD interval was associated with lower odds of NIS (adjusted OR [aOR] 0.92, 95% CI 0.90–0.94), ROSC (aOR 0.96, 95% CI 0.95–0.97), and survival to hospital discharge or 30 days (aOR 0.92, 95% CI 0.90–0.94; all $p < 0.001$). Predicted probabilities of NIS declined from 25.0% at 5 minutes to 19.2% at 10 minutes and 14.4% at 15 minutes. Restricted cubic spline analysis demonstrated a steep decline in NIS within the first 10 minutes, followed by a more gradual decrease.

CONCLUSION

Shorter CTD intervals were associated with significantly improved neurological and survival outcomes, with the greatest gains in NIS observed within the first 10 minutes. These findings highlight a narrow, time-sensitive window where rapid defibrillation offers maximal neurological benefit, supporting the prioritisation of CTD as a key prehospital performance metric.



ORAL PRESENTATION FINALIST #2



**NUR EMILIA SURAYA
BINTI MAASAR**



NURSE



**UNIVERSITI
TEKNOLOGI MARA**



Bridging The Gap Between Basic Life Support Skill Competence And Ward-Based Cardiac Arrest Response

Nur Emilia Suraya Maasar, Mohd Fazrul Mokhtar, Madiah Mohd Izham
Faculty of Medicine, Universiti Teknologi MARA (UiTM), Sungai Buloh, Malaysia

INTRODUCTION

Basic Life Support (BLS) training helps learners develop Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED) skills. However, some learners may still become disorganised during a real cardiac arrest situation. This gap between skill competence and actual emergency performance may not be obvious during standard task-trainer assessments. To improve real-life application, an “inpatient cardiac arrest simulation segment” was incorporated into the Universiti Teknologi Mara (UiTM) BLS course. This study explored participants’ hesitation, confidence, and learning experiences after the simulation and debriefing.

METHODS

The UiTM BLS course combined online theory with face-to-face training. During the practical session, participants first completed CPR/AED skills practice using task trainers, followed by small-group cardiac arrest simulations in a ward-like setting. Instructor-led debriefings followed each scenario, focusing on decision-making, teamwork, and performance improvement. Participants then completed a Likert-scale survey assessing simulation quality, confidence in cardiac arrest response, hesitation before action, and usefulness of debriefing.

RESULTS

A total of 90 participants completed the post-session survey, of whom 79 (87.78%) actively performed a key role during the simulation. Most participants agreed that the simulation helped them understand how BLS is applied in a clinical situation (98.89%), identify gaps in BLS performance (98.89%), and improve readiness to respond to cardiac arrest (98.89%). Although 97.67% reported being able to recall BLS steps during the simulation and 91.01% felt confident performing their role, 66.67% of active performers still reported hesitation before taking action. Debriefing was also positively received, with 98.89% agreeing that it helped identify areas for improvement.

CONCLUSION

Participants reported good recall of BLS steps and confidence in performing their roles; however, many still hesitated during ward-based cardiac arrest simulations. This suggests that being competent in task training does not always translate into real-life performance. Adding ward-based simulations and structured debriefing to BLS training may help learners apply their skills more effectively during emergencies.



ORAL PRESENTATION FINALIST #3



SITI NUR KHADIJAH
BT NORSEN @ NOORDIN



NURSE



INSTITUT
JANTUNG NEGARA



Management and Outcomes of Acute Hyperkalemia in the Emergency Department of Institut Jantung Negara (IJN)

Siti Nur Khadijah N¹, Farina MS¹, Lee KC¹, Ahmad Suhailan M¹

¹ Emergency Department, Institut Jantung Negara, Kuala Lumpur

BACKGROUND

Severe hyperkalemia is a life-threatening electrolyte emergency requiring immediate medical intervention to prevent fatal arrhythmias. Managing this condition is particularly challenging in heart failure patients requiring guideline-directed medical therapies with concurrent renal impairment that inherently elevate potassium levels.

OBJECTIVE

This study aimed to describe clinical characteristics, management, and outcome of hyperkalemia within a cardiac center emergency department setting.

METHODS

A single-center retrospective analysis of 97 patients was conducted in the IJN emergency department in 2025 to evaluate the clinical demographics, management of acute hyperkalemia, treatment outcomes, and safety.

RESULTS

The cohort had a mean age of 68.5 with a near-equal gender distribution (50.5% male, 49.5% female). 36% were diagnosed with severe hyperkalaemia, 60% and 4% of the cohort were moderate and mild severity respectively. Notably, 90.7% of the cohort were receiving potassium-altering medications. At presentation, the mean potassium (K^+) level was 6.45 ± 0.50 mmol/L. The primary treatment was lytic cocktail, utilized as monotherapy in 60 (61.9%) of cases. Meanwhile, 15 (15.5%) patients received lytic cocktail in combination with sodium zirconium cyclosilicate (Lokelma), and 19 (19.6%) received lytic cocktail and calcium polystyrene sulfonate (kalimate). Interventions successfully reduced K^+ by a mean of 1.35, achieving a discharge mean of 5.16 ± 0.67 mmol/L. However, a significant safety signal was identified where by 13 patients experienced post-lytic cocktail hypoglycemia (<4 mmol/L).

CONCLUSION

Hyperkalemia in cardiac emergency setting is predominantly a complication of medication and co-morbidities. The use of lytic cocktail monotherapy or in combination with potassium binder is highly effective in achieving reduction in potassium levels.



ORAL PRESENTATION FINALIST #4



**MADIAH BINTI
MOHD IZHAM**



MEDICAL OFFICER



**FACULTY OF
MEDICINE, UiTM**



Heartbeat Heroes: Building A HeartSafe Campus Through Cardiopulmonary Resuscitation And Automated External Defibrillator Readiness At UiTM Puncak Alam

Madiah Mohd Izham, Mohd Fazrul Mokhtar, Muhammad Nur Azmi Baharuddin,
Shamini Sangasamy, Muhammad Ainuddin Alias

Faculty of Medicine, Universiti Teknologi MARA (UiTM), Sungai Buloh, Malaysia

BACKGROUND

Cardiac arrest survival depends on early bystander cardiopulmonary resuscitation (CPR), automated external defibrillator (AED) use, and emergency activation. Universiti Teknologi Mara (UiTM) Puncak Alam is a large campus with a diverse community. Previous cardiac arrest incidents highlighted inadequate emergency preparedness among non-medical members, prompting the Heartbeat Heroes (HH) pilot project to develop community first responders through mass CPR/AED training and strategic AED placement. This study aimed to assess baseline CPR knowledge, AED awareness, willingness, and barriers among non medical campus population and to explore post-training confidence and emotional readiness following the programme.

METHODS

A descriptive cross-sectional study was conducted using 2025 HH pre- and post-training survey data. The pre-training survey assessed baseline CPR knowledge, AED awareness, willingness, and barriers using the "Factors Influencing External Defibrillator Use" questionnaire. The post-training survey assessed participants' positive and negative emotional responses towards performing CPR/AED using the "Positive and Negative Affect Schedule". Data were analysed descriptively.

RESULTS

Among 2,415 respondents, 93.21% recognised CPR's life-saving importance, yet only 64.97% recognised hands-only CPR and 49.07% knew certification was unnecessary. AED awareness was limited; 50.48% recognised the device, 36.52% knew correct pad placement, and only 10.64% knew campus AED locations. Willingness to perform CPR/AED was reported by 57.3% but limited by ambulance reliance (66.7%), legal (43.2%), and harm (43.3%) fears. In the post-training survey, participants reported higher mean positive emotional response score (mean=3.71) than negative emotional response score (mean=3.30). Confidence and determination were rated highly (mean=3.87) even in culturally sensitive scenarios.

CONCLUSION

HH identified important gaps in CPR knowledge and AED awareness at UiTM Puncak Alam. Post-training findings suggest encouraging confidence and emotional readiness to respond. As a scalable campus-based model, it holds potential for expansion across UiTM campuses nationwide, developing community first responders who can contribute both on and off campus.



ORAL PRESENTATION FINALIST #5



LEE, TSE-YING



DOCTOR



NATIONAL TAIWAN
UNIVERSITY HOSPITAL



Impact Of a Decision-support Interface On Mental Workload And Stress In Prehospital Stroke Triage: A Randomized Crossover Trial

Tse-Ying Lee, MD^a, Yu-Chi Lu, MS^b, Sung-Chun Tang, MD, PhD^c, Jiann-Shing Jeng, MD, PhD^c,
Kai-Wei Lin, MD^a, Wei-Tien Chang, MD, PhD^a, Yu-Ching Lee, PhD^b, Ming-Ju Hsieh, MD, PhD^a

^a Department of Emergency Medicine, National Taiwan University Hospital, Taipei, Taiwan

^b Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan

^c Stroke Center and Department of Neurology, National Taiwan University Hospital, Taipei, Taiwan

INTRODUCTION

Prehospital triage challenges in acute ischemic stroke often cause delayed treatment. This study evaluated whether a decision-support interface could reduce emergency medical technicians' (EMTs) mental workload

METHODS

This randomized crossover study was conducted between February and March 2025. Each participant completed two 12-minute simulated trials: current dispatch orders and a decision-support interface. Mental workload was assessed using heart rate variability (HRV) metrics and the NASA task load index (NASA-TLX). System usability was assessed using the System Usability Scale (SUS). The primary outcome was the root mean square of successive differences (RMSSD) for each participant. The secondary outcomes included the differences of NASA-TLX, SUS and other HRV parameters, including mean R-R interval (mRR), mean heart rate (mHR), percentage of successive R-R intervals that differ by more than 50 ms (pNN50), low-frequency power (LF), high-frequency power (HF), and low-frequency to high-frequency power ratio (LF/HF ratio).

RESULTS

A total of 35 EMT-2 participants (mean age 27.5 ± 5.3 years) completed the study. For the primary outcome, RMSSD increased significantly ($28.1113.01$ vs $32.4013.57$, $P < .01$) when the participants using the decision-support interface. For the secondary outcomes, except mHR (77.46 ± 8.61 vs 73.79 ± 10.62 , $P < .01$), mRR ($784.1989.46$ vs $808.9487.34$, $P < .01$) and HF ($370.10291.66$ vs $482.57433.87$, $P = .02$) increased when the participants using the decision-support interface. The mental demand scores in NASA-TLX decreased from 62.54 ± 14.61 to 35.45 ± 16.97 .

CONCLUSION

Integrating a decision-support interface transformed complex triage data into clear guidance, reducing EMT workload.



POSTER PRESENTATION FINALIST #1



KAI-WEI LIN



DOCTOR



NATIONAL TAIWAN
UNIVERSITY HOSPITAL



Remote Supervision and Guidance in Prehospital Care: Impact on Personnel Performance and Patient Outcome

Kai-Wei Lin¹, Ying-Chih Ko^{1,2,3*}, Szu-Han Chen¹, Wei-Tien Chang¹, Ming-Ju Hsieh^{1*}

¹ Department of Emergency Medicine, National Taiwan University Hospital, Taipei, Taiwan

² Section of Emergency Medicine, Department of Medicine, National Taiwan University Cancer Center, Taipei, Taiwan

³ Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taipei, Taiwan

BACKGROUND

Prehospital care substantially influences outcomes for critically ill patients, yet some emergency medical technicians (EMTs) may lack confidence and supervision, particularly in hemodynamically unstable cases. We evaluated a 5G-based in-ambulance telecommunication system in which EMT-paramedics provided real-time remote supervision to EMTs in the field.

METHODS

We conducted a before-and-after study in Taipei City from October 1, 2021 to November 30, 2023. A 5G telecommunication platform transmitting dual-angle audio-video from the ambulance to the dispatch center was implemented in a single basic life support team on October 1, 2022. Consecutive patients transported by this team during the pre-implementation and post-implementation periods were included. The primary outcome was the proportion of patients with unstable vital signs who received appropriate treatment in the ambulance. Secondary outcomes included changes in vital signs and process measures, as well as EMT feedback on feasibility and satisfaction.

RESULTS

A total of 805 patients were included, with 394 in the pre-implementation phase and 411 in the post-implementation phase. For the primary outcome, the proportion of patients receiving appropriate treatment increased from 75.6% to 87.4% ($p < 0.001$). Oxygen administration was similar before and after the intervention among patients with $\text{SpO}_2 < 94\%$, tachypnea, bradypnea or cardiac arrest. In hypotensive patients, the proportion receiving posture change or intravenous fluids rose from 32.6% to 75.5%. Among patients with disturbed consciousness, blood glucose testing increased from 68.5% to 82.2%. The system successfully connected in 83% of advanced life support dispatches, and most EMTs reported that remote direction improved care quality and expressed high satisfaction.

CONCLUSION

A 5G-based telecommunication system enabling EMT-paramedic remote supervision was feasible and was associated with improved adherence to prehospital treatment protocols, while being well accepted by frontline EMTs.



POSTER PRESENTATION FINALIST #2



EMILY LEONG KAI EN



MEDICAL STUDENT



RCSI & UCD
MALAYSIA CAMPUS



Establishment of an Out-of-Hospital Cardiac Arrest Registry in Penang, Malaysia

K.E. Emily Leong^{1,2}, K.H. Benjamin Leung³, Tomas Barry^{1,4}, Yuen Chin Leong⁵

¹ School of Medicine, University College Dublin, Dublin, Ireland

² RCSI & UCD Malaysia Campus, Penang, Malaysia

³ St. Michael's Hospital, Unity Health Toronto, Toronto, Ontario, Canada

⁴ School of Population Health, Royal College of Surgeons in Ireland, Dublin, Ireland

⁵ Hospital Sungai Buloh, Ministry of Health Malaysia, Sungai Buloh, Selangor, Malaysia

INTRODUCTION

In Penang, Malaysia, an out-of-hospital cardiac arrest (OHCA) registry was established in 2023 to facilitate systematic collection and analysis of OHCA occurring within the state. This paper aims to describe key data collection processes that have been developed and present a descriptive analysis of data collected during the first year of establishment.

METHODS

An online platform (myOHCA2.0) was developed to abstract data from existing pre-hospital and in-hospital data collection systems, capturing patient, event, response, and outcome characteristics in accordance with the Utstein template. OHCA occurring between 1st April 2023 and 31st March 2024 were analysed.

RESULTS

A total of 731 cases were included for descriptive analysis. Patients were predominantly male (67.7%) with a median age of 63 years. A majority of patients were of either Chinese (44.7%) or Malay (36.6%) ethnicity. Most incidents occurred in homes (84.1%). Laypersons witnessed 52.0% of cases, performed bystander CPR in 40.4% of cases, and applied an automated external defibrillator (AED) in 6.8% of cases. The median ambulance response time was 19 minutes [IQR 14-24]. Return of spontaneous circulation (ROSC) was achieved in 9.0% of cases, and the 30-day survival rate was 1.4%.

CONCLUSION

An OHCA data collection platform was developed and implemented in Penang, Malaysia. This platform serves as the basis for a national OHCA registry to enable systematic analysis of cases, which will strengthen efforts to improve the quality of care and patient outcomes continuously.



POSTER PRESENTATION FINALIST #3



ANNDRIAN LAZOLA



PARAMEDIC



INSTITUT
JANTUNG NEGARA



Optimising CPR Performance with CPR Coaching at the Institut Jantung Negara Emergency Department.

Anndrian L¹, Juliana K¹, Nurul Diyanah A², Suhailan M², Farina MS², Lee KC², Azhari R¹

¹ CPR Faculty, Institut Jantung Negara, Kuala Lumpur, Malaysia.

² Emergency Department, Institut Jantung Negara, Kuala Lumpur, Malaysia.

INTRODUCTION

High-quality cardiopulmonary resuscitation (CPR) is the cornerstone of cardiac arrest care, yet maintaining adherence to guideline metrics remains challenging in the clinical setting. The 2025 American Heart Association guidelines re-emphasises the potential role of a CPR Coach to coordinate high-performance teams. At Institut Jantung Negara (IJN), we integrated this role into our resuscitation teams through formal institutional ACLS training, and additional in-house CPR Coach courses for our staffs since 2024.

OBJECTIVE

To determine if integrating a trained CPR Coach into the resuscitation teams can improve CPR quality during cardiopulmonary arrests in the emergency department (ED).

METHODS

This is a retrospective observational study conducted in the IJN ED from August 2025 to February 2026. CPR Coaches were responsible for providing real-time verbal feedback of CPR performance to compressors, utilizing Audio-Visual feedback technology. CPR metric data from three ED defibrillators were captured and analysed using RescueNet® Case Review software. Key performance indicators measured included: the proportion of chest compressions (CC) achieving target depth (5–6 cm) and rate (100–120 min⁻¹), average release velocity, CC fraction (CCF), and the duration of pre-shock and post-shock pauses.

RESULTS

A total of 13 cardiac arrest events were analysed. Over the period of 7 months, there is a trend of improvement in average target depth of 5–6 cm, target rate of 100–120 min⁻¹, and average release velocity. The average CCF showed most cases were >60%. However, more than half of the cases showed peri-shock pauses >10 seconds. Full data stratifying performance metrics will be presented at the conference.

CONCLUSION

Preliminary findings suggest integrating a CPR Coach into the resuscitation team structure at IJN's ED is associated with a trend of high compliance with international CPR quality metrics. CPR Coach should be a standard component of the CPR team in the Malaysian healthcare setting.

KEYWORDS

CPR Coach, Cardiac Arrest, Resuscitation, Quality Improvement, Emergency Department, Malaysia.



POSTER PRESENTATION FINALIST #4



TAN TEIK KEAN



PARAMEDIC



ST. JOHN AMBULANCE
OF MALAYSIA



Community Responder Activation for Out-of-Hospital Cardiac Arrest: A Three-Year Observational Study On Efficiency of Volunteer Chat Group Mobilisation

TK Tan, JB Lim, Lawrence CL Tan, TS Yee
St. John Ambulance of Malaysia State of Penang, Penang, Malaysia

Early cardiopulmonary resuscitation (CPR) and rapid response are critical determinants of survival in out-of-hospital cardiac arrest (OHCA). Community responder systems may shorten the interval between collapse and first intervention before ambulance arrival. In our setting, OHCA alerts are disseminated through a volunteer responder chat group initiated either by the emergency medical dispatch centre or community volunteers. A retrospective observational study was conducted over a three-year period (2023–2025) to evaluate the operational efficiency and engagement of a volunteer chat group mobilisation system for OHCA. Data were collected from dispatch centre records and volunteer responder logs. Variables analysed included the source of activation (dispatch centre vs. volunteer) and volunteer attendance rates over time. Descriptive statistics were used to summarise the findings. During the three-year study period, OHCA alerts were successfully initiated by both the emergency medical dispatch centre and community volunteers. The dispatch centre shared a total of 837 cases within the chat group. Volunteers actively attended 336 (40.1%) of these dispatch-initiated cases. Notably, volunteer attendance demonstrated a consistent year-over-year increase, with 85 cases attended in 2023, 115 in 2024, and 136 in 2025. In a subset of these attended cases, early CPR and initial resuscitative measures were initiated by community responders prior to the arrival of emergency medical services. The integration of a volunteer responder chat group with dual-activation (dispatch and volunteer) is an efficient and sustainable mechanism for community mobilisation during OHCA events. Over a three-year period, this system demonstrated growing volunteer engagement, successfully facilitating early attendance and critical prehospital interventions. Collaboration between dispatch centres and trained community responders can strengthen the chain of survival in OHCA.



POSTER PRESENTATION FINALIST #5



SYED JOHARI SYED SHAFI



MEDICAL OFFICER



HOSPITAL
TUANKU FAUZIAH



OUT-OF-HOSPITAL MATERNAL CARDIAC ARREST & PERIMORTEM CESAREAN SECTION: A Case Report and Discussion of a Multidisciplinary Success Story in a Minor Specialist Hospital

Syed Johari, Hanis Johani (Emergency Department, Hospital Kepala Batas)

BACKGROUND

Out-of-hospital maternal cardiac arrest is a rare, life-threatening emergency demanding rapid multidisciplinary intervention. Perimortem cesarean section (PMCS) is an essential component of maternal resuscitation, aimed primarily at restoring maternal hemodynamics by relieving aortocaval compression. We report successful maternal and fetal outcomes following an out-of-hospital cardiac arrest managed in a minor specialist hospital.

CASE PRESENTATION

A 33-year-old pregnant woman (Gravida 2, Para 0+1) with pre-eclampsia presented to the emergency department in cardiac arrest, having been unconscious for ten minutes. High-quality cardiopulmonary resuscitation (CPR) was immediately initiated. A PMCS was performed by the obstetrics team at the ninth minute of CPR, resulting in the successful delivery of a baby boy, who was resuscitated by the pediatric team. The mother achieved return of spontaneous circulation (ROSC) three minutes post-delivery. Her course was complicated by severe postpartum hemorrhage secondary to uterine atony and a second brief cardiac arrest. These were successfully managed with targeted resuscitation, blood transfusions, uterine massage, and a B-Lynch suture. Following intensive care and prolonged neuro-rehabilitation, she was discharged five months postpartum. At 1.5 years, she demonstrated tremendous neurological recovery, regaining independence. Her son is achieving normal developmental milestones.

CONCLUSION

This case highlights the absolute feasibility and lifesaving potential of PMCS in minor specialist hospitals. Rapid identification, high-quality CPR with continuous left uterine displacement, and swift execution of PMCS are vital for optimizing maternal and fetal survival. Multidisciplinary teamwork and continuous skill enhancement remain cornerstones for managing obstetric emergencies.



ABSTRACT

SUBMISSION #1



CHIN ANNSHA VEIMERN
A/P CHIN CHIANG GEE



MEDICAL OFFICER



HOSPITAL
KUALA LIPIS



The Double-Edged Sword of Fluid Resuscitation in Severe Scrub Typhus with Acute Respiratory Distress Syndrome

AV Chin¹, A Hazani¹, F Anum¹, Faiezah¹

¹ Hospital Kuala Lipis, Kuala Lipis, Pahang, Malaysia

BACKGROUND

Scrub typhus is an infection caused by *Orientia tsutsugamushi*. Severe infection may progress to septic shock, respiratory distress and multiorgan failure. Fluid administration is crucial in resuscitating infected patient. Still, it is challenging due to increased capillary permeability caused by the organism which may cause fluid overload. This case highlights the difficulty of balancing perfusion and fluid overload in severe scrub typhus.

CASE DESCRIPTION

A 26-year-old lady presented with fever for 13 days, dyspnoea for 3 days after visited to an orchard. Examination showed tachycardia, tachypnoea and eschar over the inguinal region. Initial bedside ultrasound showed collapsible inferior vena cava with preserved cardiac contractility. Early fluid resuscitation started with guidance from clinical assessment and point-of-care ultrasound. However, she progressed to worsening respiratory distress, necessitating escalation of oxygen therapy. This progressed from non-invasive ventilation to eventual intubation. Serial Chest x-rays and CT pulmonary angiogram demonstrated changes consistent with pulmonary oedema. Following vasopressors, diuretics, and mechanical ventilation were initiated. Yet, the patient deteriorated, developing refractory septic shock, severe metabolic acidosis and cardiovascular collapse. Despite intensive resuscitative efforts, she succumbed.

DISCUSSION

Fluid resuscitation is essential in managing septic shock; however, severe scrub typhus presents a unique challenge due to profound endothelial dysfunction and capillary leak syndrome. In the early phase of sepsis, intravascular volume depletion may coexist with preserved cardiac function, requiring initial fluid administration to restore tissue perfusion. Nevertheless, scrub typhus-associated vasculitis can progress rapidly, leading to increased vascular permeability and accumulation of interstitial and alveolar fluid. Hence, it is important to recognise the transition from "fluid responsive" to "fluid intolerant".

CONCLUSION

This case shows the complexity of fluid resuscitation in severe scrub typhus with septic shock. While early fluid administration is lifesaving, excessive administration may worsen capillary leak and respiratory failure. Judicious, individualised fluid strategies are crucial to optimise outcomes.



ABSTRACT

SUBMISSION #2



**FAISZA BINTI
ABDUL AZIZ**



**SPECIALIST /
CONSULTANT**



**HOSPITAL SULTANAH
AMINAH JOHOR BAHRU**



From Collapse to ROSC: The Impact of Integrated Prehospital Response in OHCA

Faisza Abdul Aziz^{1,2}, Murniza Murad¹, David Pflug³, M. Syahir Hishamuddin³, M. Shah Rudin³, Kho Min Xiang³, Marcus Ong Eng Hock^{2,4,5}

Affiliations

¹ Emergency Department, Hospital Sultanah Aminah Johor Bahru, Johor, Malaysia

² Prehospital and Emergency Research Centre (PERC), Duke-NUS Medical School, Singapore

³ Singapore Civil Defence Force (SCDF), Singapore

⁴ Department of Emergency Medicine, Singapore General Hospital, Singapore

⁵ Unit for Pre-Hospital Emergency Care (UPEC), Ministry of Health, Singapore

INTRODUCTION

Out-of-hospital cardiac arrest (OHCA) remains a major public health emergency with high mortality worldwide.¹ Survival depends on effective implementation of the “Chain of Survival,” including early recognition, CPR, defibrillation, advanced life support, and post-cardiac arrest care.² Timely intervention improves ROSC, survival, and neurological outcomes.³ Public CPR competency, rapid emergency response, and responder coordination influence outcomes.⁴ This Singapore ambulance ride highlights the coordinated multi-tier prehospital response during an OHCA event.⁵

CASE DESCRIPTION

A 56-year-old man collapsed in the lobby of his residential housing complex and was witnessed by a neighbour who immediately initiated bystander CPR and activated emergency medical services, consistent with current resuscitation guidelines emphasizing early CPR initiation.⁶ A Fire crew functioning as Basic Life Support (BLS) responders arrived promptly, continued high-quality CPR, and applied an automated external defibrillator (AED) for rhythm assessment and defibrillation when indicated.⁷ Ambulance responders subsequently arrived, secured the airway, and initiated advanced life support medications while a motorcycle responder maintained uninterrupted CPR.⁸ Continuous CPR was maintained during transport using a mechanical CPR device to minimize chest compression interruptions.⁹ Advanced cardiac life support interventions and medications continued en route to the hospital.¹⁰ Upon arrival at the emergency department, the patient achieved return of spontaneous circulation (ROSC).¹¹

LEARNING POINT

Early recognition, rapid emergency activation, immediate bystander CPR, and early AED defibrillation are critical determinants of OHCA survival.^{2,6,7} Coordinated multi-tier responder systems and the use of mechanical CPR devices help maintain high-quality resuscitation and improve continuity of prehospital cardiac arrest care and patient outcomes.^{5,9}

CONCLUSION

Improving community CPR education, expanding AED accessibility, and strengthening multi-tier emergency response systems including dispatcher-assisted CPR, national AED registries, and continuous public awareness campaigns may improve OHCA outcomes and optimize the Chain of Survival across Asia.^{4,12,13,14}



ABSTRACT

SUBMISSION #3



**MUHAMMAD AZRA HAFIZI
BIN AHMAD AZAM**



**MEDICAL
OFFICER**



**NATIONAL CANCER
INSTITUTE**



From Daycare to Critical Care: A Simple Pathway to Improve Early Survival in Anaphylaxis-Induced Cardiac Arrest

Muhammad Azra Hafizi Ahmad Azam¹, Halimatun Sa'adiah Muslim¹, Noorulhana Sukarnakadi Hadzarami¹

¹Department of Anaesthesiology and Critical Care, National Cancer Institute, Putrajaya, Malaysia

INTRODUCTION

Despite major advances in resuscitation science, outcomes still depend on actions taken during the first minutes of deterioration, often before critical care teams arrive. In anaphylaxis, deterioration is often driven by hesitation, diagnostic uncertainty and dosing ambiguity surrounding adrenaline administration, especially in settings where critical deterioration is usually unexpected. This highlights the need for simple, standardised approaches that support timely recognition and intervention during life-threatening deterioration.

CASE DESCRIPTION

We report a patient with ovarian malignancy who developed anaphylactic shock following intravenous Paclitaxel infusion in a daycare ward setting. Initial stability rapidly progressed to cardiovascular collapse. Recognition of a clear temporal trigger prompted an immediate emergency response, escalation of care and resuscitative measures. The arrest was witnessed and prompt referral to the critical care team was made, allowing high-quality cardiopulmonary resuscitation resulting in return of spontaneous circulation and subsequent stabilisation in intensive care. This case highlights the critical transition from early recognition in a non-critical environment to definitive resuscitative care.

LEARNING POINTS

We propose a trigger-based dual-pathway response model to reduce hesitation and standardise early anaphylaxis management across care settings.

(i) Yellow pathway (anaphylaxis with preserved circulation). A laminated yellow card identifies anaphylaxis with preserved circulation and provides standardised guidance on intramuscular adrenaline dosing and injection site to support immediate treatment.

(ii) Red pathway (anaphylaxis-associated cardiac arrest). A laminated red card identifies anaphylaxis-associated cardiac arrest and guides standard advanced life support, including intravenous adrenaline administration.

This model combines trigger-based recognition, cognitive offloading, visual standardisation and parallel emergency activation to support rapid, consistent action across the healthcare system.

CONCLUSION

Outcomes in anaphylaxis are determined in the first minutes. A trigger-based dual-pathway approach offers a practical framework for global collaboration by reducing delay and strengthening the chain of survival from first response to critical care.



ABSTRACT

SUBMISSION #4



FAIZATUL EZMIRA
BINTI ABU HASSAN



PARAMEDIC



INSTITUT JANTUNG
NEGARA



Discrepancy in Chest Compression Depth: Mechanical CPR Device vs. Defibrillator Audio-Visual (AV) Feedback System

Faizatul Ezmira AH, Noorakmawati M, Farina MS, Lee KC, Suhailan M
Emergency Department, Institut Jantung Negara, Kuala Lumpur, Malaysia

INTRODUCTION

High-quality chest compressions are fundamental to cardiac arrest survival. Current guidelines recommend a compression depth of 5–6 cm. Mechanical CPR devices are increasingly used to deliver consistent compressions, while defibrillators provide real-time audio-visual (AV) feedback to guide CPR quality. However, these systems use different technologies to estimate depth, which may result in clinically significant discrepancies. We report an observation highlighting this potential difference.

METHODS

We performed an observational comparison between compression depth delivered by a mechanical CPR device and depth reported by the AV feedback system of a defibrillator. Depth values from the AV feedback system were recorded during CPR on a training mannequin and during one real-life resuscitation. The mechanical CPR device was set to deliver compression at a depth of 5 cm in both instances.

RESULTS

During mannequin training, the depth reported by the AV feedback system closely matched the preset 5 cm depth delivered by the mechanical device. However, during the actual resuscitation, the AV feedback system reported compression depths exceeding 6 cm.

DISCUSSION

The discrepancy observed in the clinical case, but not in simulation, may be explained by differences in thoracic compliance and resistance between real patients and CPR mannequins. Mannequins provide standardized, predictable resistance. In contrast, human thoraxes demonstrate variable compliance influenced by body habitus, age, and underlying pathology. The mechanical CPR device delivers a fixed displacement, but the actual depth achieved may vary with patient-specific factors. The AV feedback system, measures actual sternal displacement, may therefore detect over- or under-compression not apparent from the device settings alone.

CONCLUSION

The observed discrepancy suggests that relying solely on a mechanical device's preset depth may not guarantee guideline-compliant compressions. Combining mechanical CPR with an AV feedback device may allow the team to make real-time adjustments, optimizing compression depth for individual patient characteristics.



ABSTRACT

SUBMISSION #5



**DARWINA
BINTI BOLKIM**



MEDICAL OFFICER



**INSTITUT JANTUNG
NEGARA**



The Therapeutic Dilemma of Cardiopulmonary Resuscitation-Induced Consciousness: A Case Series

Darwina B¹, Nursuraya Al¹, Luqman Faiz M¹, Lee KC¹, Ahmad Suhailan M¹, Farina MS¹
¹Emergency Department, Institut Jantung Negara, Kuala Lumpur

BACKGROUND

Cardiopulmonary Resuscitation-Induced Consciousness (CPRIC) is a rare but increasingly recognized phenomenon where patients demonstrate signs of awareness during cardiopulmonary resuscitation (CPR). With growing emphasis on high-quality chest compressions, clinicians are encountering CPRIC more frequently. It presents a therapeutic dilemma: how to continue life-saving resuscitation while managing a conscious, potentially distressed patient.

CASE SERIES

Patient A: A 57-year-old male with acute inferior-lateral STEMI developed cardiac arrest (CA) during monitoring. CPR was initiated for ventricular fibrillation (VF). Remarkably, despite confirmed VF, the patient verbalized pain and made purposeful attempts to resist chest compressions. Upon pausing CPR, he became immediately unresponsive with loss of pulse. The movements recur upon CPR resumption. However, return of spontaneous circulation (ROSC) was not achieved, and the patient unfortunately succumbed.

Patient B: A 69-year-old male with acute inferior STEMI Killip Class IV received IV Tenecteplase before developing CA in the emergency department. During CPR, spontaneous purposeful hand and eye movements were observed, ceasing immediately upon pausing compressions with absent pulse — consistent with CPRIC. IV Midazolam 5mg was administered, after which purposeful movements resolved. Despite prolonged resuscitation efforts, ROSC was not achieved.

DISCUSSION

CPRIC occurs in fewer than 1% of CA cases and is more prevalent in younger patients during early high-quality CPR. The phenomenon arises when effective compressions generate sufficient cerebral perfusion to restore partial cortical function, despite absent cardiac output. It may impede resuscitation efforts and cause significant patient distress. Management strategies include the use of pharmacological sedation. The Nebraska Model Protocol recommends ketamine with consideration of adjunctive midazolam and a ketamine infusion for sustained sedation.

CONCLUSION

CPRIC represents a unique clinical and ethical challenge for resuscitation teams. Awareness of this phenomenon and prompt recognition are essential to ensure effective resuscitation while minimizing patient distress.



ABSTRACT

SUBMISSION #6



LEE KEE CHOON



SPECIALIST /
CONSULTANT



INSTITUT JANTUNG
NEGARA



Time is Myocardium, Data is Strategy: A Decade of PPCI Registry Analytics Driving Operational Excellence at Institut Jantung Negara

Lee KC¹, Ahmad Suhailan M¹, Farina MS¹, Intan Safarinaz S²

¹Emergency Department, Institut Jantung Negara, Kuala Lumpur

²Clinical Research Department, Institut Jantung Negara, Kuala Lumpur

BACKGROUND

"Time is myocardium" in the management of ST-elevation myocardial infarction (STEMI). While primary percutaneous coronary intervention (PPCI) is the established gold standard, its effective delivery demands both clinical excellence and real-time, actionable data to drive continuous workflow optimization.

METHODS

A retrospective analysis of 3791 PPCI cases at IJN (2012 – January 2026) was performed using a prospective clinical registry. Cases were stratified by year, day of week, and hour of arrival. Key performance metrics included Door-to-Balloon Time (DBT), referral patterns, and patient outcomes. Temporal heatmapping was applied to identify high-volume arrival clusters and a macroscopic view of institutional efficiency. DBT was further analyzed to determine whether statistically significant differences existed between weekday and weekend cases, and between office-hour and after-hour presentations

RESULTS

Annual PPCI volumes increased substantially, from 67 cases in 2012 to a peak of 441 in 2024. Heatmap analysis revealed marked variation in case distribution across days and hours. Monday (n=572) and Friday (n=575) recorded the highest weekly volume, with peak arrival clustered between 12:00 and 15:00. Cases were distributed across all hours without a true off-peak period, underscoring the need for sustained, round-the-clock PPCI capability. These temporal patterns provide actionable intelligence for staffing optimization and resource allocation. Despite increasing volume, the institutional median DBT was maintained at 52 minutes, significantly below the international benchmark of 90 minutes. The standard deviation of 23.8 minutes highlights the data's value in identifying outliers for targeted clinical audits. No statistically significant differences in DBT were observed between weekend and weekday, or office-hour and after-hour presentations ($p>0.05$).

CONCLUSION

Systematic use of registry-driven analytics shifts institutional practice from retrospective reporting to proactive management. This evidence-based approach is essential to sustaining clinical excellence, optimizing operational efficiency, and ultimately improving survival outcomes.



ABSTRACT SUBMISSION #7



**SITI NAJWA
BINTI SHAMSUDIN**



MEDICAL OFFICER



**HOSPITAL
KEPALA BATAS**



The Magical Of Wave – The Life Saving Role Of Ultrasound

Dr Thamayanthy A/P Krishnan | Dr Siti Najwa Shamsudin | Dr Suhaida Hanis Johani
Hospital Kepala Batas, Pulau Pinang, Malaysia

Shock is a life-threatening clinical condition characterized by inadequate tissue perfusion, resulting in insufficient oxygen and nutrient delivery to meet the metabolic demands of vital organs. A correct interpretation of shock will determine its management. We reviewed a case that presented as two different types of shock with different management. A young lady with no premorbid history presented to the emergency department complained of multiple episodes of vomiting. During the presentation, she appeared jaundiced with classical signs of shock; coolish peripheries, moderate pulse volume and low blood pressure. A day before, she had cut her wrist and went seeking treatment, subsequently was discharged with antibiotics and painkillers. She later developed symptoms after two hours consuming medication. With clinical history and basic physical examination, we treated her as a case of anaphylactic shock. However, clinical suspicion arose during treatment as she was not responding to the IM Adrenaline given. Bedside ultrasound was performed, IVC noted to be plethoric with echocardiogram showed dilated right ventricle with D-Shaped LV. Ultrasound finding raised suspicion in pulmonary embolism leading to obstructive shock. Subsequently, CTPA was performed revealing segmental right lower lobe pulmonary embolism. She was treated according to the management of pulmonary embolism, and later the cause for pulmonary embolism was investigated. In conclusion, patients with pulmonary embolism may present with atypical symptoms, and clinical history alone is not enough to raise suspicion. Ultrasound is a vital real – time imaging tool for rapid evaluation of patients with shock and guiding treatment. To include ultrasound as part of clinical evaluation is proven beneficial towards patient's management.



ABSTRACT

SUBMISSION #8



JUNNIE OOI WEI ENG



NURSE



PANTAI
HOSPITAL PENANG



Five-Year Retrospective Analysis of Code Blue Outcomes and ROSC Trends in a Tertiary Hospital: A Hospital-Wide Review (2021–2025)

Junnie WE Ooi, Victor BJ Lim, Eric BK Tan, CH Lim
Pantai Hospital Penang, Penang, Malaysia

Return of spontaneous circulation (ROSC) is a key indicator of successful cardiac arrest resuscitation and reflects the effectiveness of hospital emergency response systems. Monitoring Code Blue trends over time provides valuable insight into resuscitation outcomes and helps identify factors associated with improved survival. A retrospective observational review was conducted on all hospital-wide Code Blue cases from January 2021 to December 2025 in a tertiary hospital, including Out-of-Hospital Cardiac Arrest (OHCA) and In-Hospital cardiac arrest (IHCA) cases. Data collected included annual Code Blue frequency, departmental distribution, and outcomes categorized as ROSC or death. Trends in ROSC rates and case distribution were analyzed descriptively. A total of 308 Code Blue cases were recorded over five years, with annual cases decreasing from 80 in 2021 to 46 in 2025. ROSC rates demonstrated an overall improving trend: 41% (38/80) in 2021, 49% (31/63) in 2022, 37% (20/54) in 2023, 55% (36/65) in 2024, and 52% (24/46) in 2025. Across all five years, ICU consistently recorded the highest number of Code Blue activations, reflecting the concentration of critically ill high-risk patients in this setting. Although no single targeted intervention was introduced, the improved ROSC trend may reflect cumulative effects of increased staff participation in CPR, regular Code Blue simulation drills, deployment of nurses for ED and ICU simulation training, improved closed-loop communication, clearer role allocation, accurate time recording of medication intervals, timely adrenaline administration according to protocol, and earlier recognition of patient deterioration. This five-year hospital-wide review demonstrates a positive upward trend in ROSC outcomes despite the absence of a specific formal intervention. Sustained staff engagement, simulation-based training, and strengthened resuscitation team performance may contribute to improved cardiac arrest survival. Further studies are needed to identify the most significant factors influencing ROSC improvement and guide future quality improvement strategies.



ABSTRACT

SUBMISSION #9



LIEW LE XUAN



MEDICAL STUDENT



SINGAPORE
GENERAL HOSPITAL



Validity of the EQ-5D-5L in Assessing the Health-Related Quality of Life of Out-of-Hospital Cardiac Arrest Survivors in Singapore

Pin Pin Pek¹, Le Xuan Liew², Andrew Fu Wah Ho³, Shir Lynn Lim⁴, Felix Maverick Rubillar Uy⁵, Vui Kian Ho⁶, Yew Woon Chia⁷, Jia Min Chua⁸, Wei Ming Ng⁹, Marcus Eng Hock Ong^{*10}, Nan Luo^{*11}

¹ Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore; Department of Emergency Medicine, Singapore General Hospital, Singapore; Yong Loo Lin School of Medicine, National University of Singapore, Singapore

² Department of Emergency Medicine, Singapore General Hospital, Singapore

³ Department of Emergency Medicine, Singapore General Hospital, Singapore; Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore; Centre for Population Health Research and Implementation, SingHealth Regional Health System, Singapore

⁴ Department of Cardiology, National University Heart Centre, Singapore; Department of Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore; Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore

⁵ Department of Cardiology, Changi General Hospital, Singapore

⁶ Department of Intensive Care Medicine, Sengkang General Hospital, Singapore

⁷ Cardiac Intensive Care Unit, Department of Cardiology, Tan Tock Seng Hospital, Singapore

⁸ Department of Cardiology, Khoo Teck Puat Hospital, Singapore

⁹ Emergency Medicine Department, Ng Teng Fong General Hospital, Singapore

¹⁰ Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore; Department of Emergency Medicine, Singapore General Hospital, Singapore

¹¹ Saw Swee Hock School of Public Health, National University of Singapore, Singapore; Yong Loo Lin School of Medicine, National University of Singapore, Singapore

*co-last authors

BACKGROUND

Studies evaluating the measurement properties of the EQ-5D-5L in out-of-hospital cardiac arrest (OHCA) population are scarce. We aimed to evaluate the construct validity of the EQ-5D-5L in OHCA survivors.

METHODS

This was a cross-sectional study involving adult OHCA survivors from all restructured hospitals in Singapore from February 2023 to January 2026, 3 months after their hospital discharge. We evaluated the construct validity of the EQ-5D-5L in terms of known-groups, convergent, and divergent validity, with the reference measures being key demographics, other patient- and observer-reported outcomes measures, and clinical assessments of cognition and functional status. We tested 26 a-priori hypotheses and used Mann-Whitney U test and Spearman's correlation to assess know-groups and convergent/divergent validity, respectively. Correlation of $r < 0.30$ was defined as weak, $0.30-0.49$ moderate, and ≥ 0.50 strong. Construct validity was supported if $\geq 75\%$ of the hypotheses were confirmed. Data completeness, and floor and ceiling effects (defined as $>15\%$ of respondents reporting perfect/worst health) were also assessed.



ABSTRACT

SUBMISSION #9



LIEW LE XUAN



MEDICAL STUDENT



SINGAPORE
GENERAL HOSPITAL



Validity of the EQ-5D-5L in Assessing the Health-Related Quality of Life of Out-of-Hospital Cardiac Arrest Survivors in Singapore

Pin Pin Pek¹, Le Xuan Liew², Andrew Fu Wah Ho³, Shir Lynn Lim⁴, Felix Maverick Rubillar Uy⁵, Vui Kian Ho⁶, Yew Woon Chia⁷, Jia Min Chua⁸, Wei Ming Ng⁹, Marcus Eng Hock Ong^{*10}, Nan Luo^{*11}

¹ Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore; Department of Emergency Medicine, Singapore General Hospital, Singapore; Yong Loo Lin School of Medicine, National University of Singapore, Singapore

² Department of Emergency Medicine, Singapore General Hospital, Singapore

³ Department of Emergency Medicine, Singapore General Hospital, Singapore; Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore; Centre for Population Health Research and Implementation, SingHealth Regional Health System, Singapore

⁴ Department of Cardiology, National University Heart Centre, Singapore; Department of Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore; Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore

⁵ Department of Cardiology, Changi General Hospital, Singapore

⁶ Department of Intensive Care Medicine, Sengkang General Hospital, Singapore

⁷ Cardiac Intensive Care Unit, Department of Cardiology, Tan Tock Seng Hospital, Singapore

⁸ Department of Cardiology, Khoo Teck Puat Hospital, Singapore

⁹ Emergency Medicine Department, Ng Teng Fong General Hospital, Singapore

¹⁰ Pre-hospital & Emergency Research Centre, Health Services Research and Population Health, Duke-NUS Medical School, Singapore; Department of Emergency Medicine, Singapore General Hospital, Singapore

¹¹ Saw Swee Hock School of Public Health, National University of Singapore, Singapore; Yong Loo Lin School of Medicine, National University of Singapore, Singapore

*co-last authors

RESULTS

121 OHCA survivors were included in the analysis. Median age of survivors was 59 years (IQR:53-66); 109 (90%) were males. Validity of the EQ-5D-5L was supported with >80% of the hypotheses confirmed. There was no missing response to the EQ-5D-5L. 70 (58%) survivors reported perfect health ("11111"); none of the survivors reported worst health ("55555"), suggesting presence of ceiling effect but not floor effect.

CONCLUSION

In this study, we demonstrated the validity and feasibility of the EQ-5D-5L in assessing the HRQoL of OHCA survivors in Singapore. However, the presence of ceiling effects limits its sensitivity in detecting subtle differences or changes in HRQoL.



ABSTRACT

SUBMISSION #10



**MUHAMMAD AIMAN
BIN SHUIB**



**SPECIALIST /
CONSULTANT**



**HOSPITAL
GUA MUSANG**



Paediatric Out-of-Hospital Cardiac Arrest Resuscitation in Rural Practice : Lessons Learnt

S Muhammad Aiman¹, MS Normasniati¹, G Mohamad Akram²

¹ Department of Paediatric, Hospital Gua Musang, Gua Musang, Kelantan, MALAYSIA.

² Department of Emergency & Trauma, Hospital Gua Musang, Gua Musang, Kelantan, MALAYSIA.

KEYWORDS

Paediatric out-of-hospital cardiac arrest; Endotracheal adrenaline; Emergency resuscitation; Rural; Effective bag-valve-mask ventilation

INTRODUCTION

Paediatric cardiac arrest is a high-stress emergency, especially in out-of-hospital settings with limited experienced staff, transportation delays, inadequate preparation, and equipment constraints. In infants, arrests are commonly respiratory in origin; therefore, effective ventilation and early oxygenation are critical components of resuscitation.

CASE DESCRIPTION

A limp, cyanosed 44-day-old infant presented to a health clinic with circulatory collapse, dilated pupils, heart rate 150 bpm, and temperature 36.8°C. Resuscitation began with bag-valve-mask ventilation and chest compressions. Two intubation attempts, airway adjunct insertion, and intravenous access failed. Following teleconsultation with the on-call paediatrician, the infant was urgently transferred with ongoing ventilation and chest compressions after pre-alerting emergency and paediatric teams for extensive resuscitation. On arrival, she was pink. Definitive airway access was secured and immediate endotracheal adrenaline (1:10,000; 1 mL/kg) administration achieved return of spontaneous circulation and oxygen saturation improved. Vascular access remained difficult after failed intraosseous attempts, requiring ultrasound-guided central venous access. Investigations demonstrated persistent severe metabolic acidosis, profound anaemia, and coagulopathy despite aggressive fluid resuscitation, blood transfusion, bicarbonate and haemostatic therapy, adrenaline infusion, and antibiotics. Brain imaging revealed massive intracranial haemorrhage with ventriculomegaly. The infant was transferred safely to a tertiary intensive care centre.

LEARNING POINTS

Children deteriorate rapidly from hypoxia; therefore, effective ventilation remains the cornerstone of resuscitation. When intubation fails, high-quality bag-valve-mask ventilation is preferable to unsuccessful intubation attempts. Early escalation, transfer, and telemedicine consultation may support timely decision-making in rural settings. Definitive airway with alternative endotracheal administration is utmost. Communication skills, availability of airway equipment, and regular advanced resuscitation simulation training are essential across all healthcare levels to improve emergency preparedness.

CONCLUSION

This case highlights the challenges of paediatric out-of-hospital cardiac arrest. Early ventilation, timely escalation, and coordinated multidisciplinary management are crucial to improve outcomes and strengthen rural paediatric emergency care systems.



ABSTRACT SUBMISSION #11



KAI-WEI LIN



DOCTOR



NATIONAL TAIWAN
UNIVERSITY HOSPITAL



Efficacy and safety of normobaric hyperoxia for acute ischemic stroke: a systematic review and meta-analysis

Kai-Wei Lin¹, Wei-Tien Chang¹

¹ Department of Emergency Medicine, National Taiwan University Hospital, Taipei, Taiwan

BACKGROUND / INTRODUCTION

Normobaric hyperoxia (NBO) has emerged as a potential neuroprotective treatment for acute ischemic stroke (AIS). While its role as an adjuvant to endovascular treatment (EVT) has gained recent attention, its overall efficacy across various clinical scenarios remains debated. We aimed to evaluate the comprehensive impact of NBO on patients with AIS, analyzing reperfusion therapies like EVT and intravenous thrombolysis (IVT) as specific subgroups.

METHODS

Following PRISMA guidelines, we systematically reviewed 7351 articles and included 31 studies comparing NBO with control groups (room air or standard low-flow oxygen) in patients with AIS. The critical efficacy outcomes evaluated were 90-day survival and 90-day favourable functional outcome, defined as a modified Rankin Scale (mRS) score of less than 3. Subgroup analyses were rigorously performed based on concurrent reperfusion strategies (EVT and IVT) and oxygen flow rates.

RESULTS

Among the 31 included studies, NBO demonstrated a solid safety profile, with no significant increase in symptomatic intracranial hemorrhage or other major complications. While prophylactic low-dose oxygen in unselected non-hypoxic patients did not significantly alter overall outcomes, subgroup analyses highlighted the critical value of NBO during reperfusion. Specifically, high-flow NBO administered as an adjuvant to EVT significantly improved 90-day functional independence (mRS < 3), particularly in patients with anterior circulation stroke. However, the benefit for overall 90-day survival was not statistically significant (Risk Ratio 1.06, 95% Confidence Interval 0.99-1.14).

CONCLUSION

NBO is a safe and effective adjunctive neuroprotective therapy for patients with AIS. Although the 90-day survival rate was not significantly altered, therapeutic high-flow NBO significantly enhances 90-day functional recovery without increasing hemorrhagic or safety risks when combined with reperfusion strategies such as EVT and IVT.



ABSTRACT

SUBMISSION #12



**MUHAMMAD AIMAN
BIN SHUIB**



**SPECIALIST /
CONSULTANT**



**HOSPITAL
GUA MUSANG**



Challenges in Resuscitating Paediatric Major Trauma with Transabdominal Evisceration : Lessons from a Rural District Hospital

S Muhammad Aiman¹, MS Normasniati¹, AH Farah Madiehah², El Engku Nur Athirah³,
MP Siti Farhan⁴

¹ Department of Paediatric, Hospital Gua Musang, Gua Musang, Kelantan, MALAYSIA.

² Department of Surgery, Hospital Gua Musang, Gua Musang, Kelantan, MALAYSIA.

³ Department of Emergency & Trauma, Hospital Gua Musang, Gua Musang, Kelantan, MALAYSIA.

⁴ Unit of Paediatric Surgery, Department of Surgery, Hospital Raja Perempuan Zainab II, Kota Bharu, Kelantan, MALAYSIA

KEYWORDS

Paediatric major trauma; Abdominal evisceration; Emergency resuscitation; Rural; Challenges

INTRODUCTION

Paediatric major trauma is unpredictable, unique, challenging resuscitation and the most stressful emergency scenarios especially in rural facility, particularly with unpreparedness, limited staff experience and equipment existed, especially in resuscitating trans-abdominal injury with evisceration post motor vehicle accident in a rural district hospital setting.

CASE DESCRIPTION

An unidentified 8-month-old girl was brought after a car-trailer head-to-head collision with an unknown mechanism of injury had massive open abdominal wound with bowel evisceration, head injury, decompensated hypovolaemic shock, bilateral hip bruises with coagulopathy and transaminitis. Her parents died at the scene. A multidisciplinary team was activated. She was semi-conscious with respiratory distress requiring manual in-line stabilization and intubation. Her initial vitals were GCS 8/15, BP 60/15(40)mmHg, HR 190bpm, RR 60bpm and SpO2 100% pre- and post-intubation. Extensive initial fluids resuscitation and massive blood transfusions were administered including antibiotics coverage and haemostatic agents to expedite resolution of acidosis and shock. Early inotropic support, infusion morphine and midazolam were initiated to preserve cerebral perfusion. Within 4 hours, the eviscerated bowels were protected, covered by multiple layers of sterile plastic with tape at border to secure haemostasis in catastrophic external haemorrhage. She was safely transferred to tertiary centre for intensive care and definitive surgery.

LEARNING POINTS

Paediatric emergency preparedness with effective multidisciplinary team approach and communication skills with telemedicine are the crucial steps taken for stabilization prior definitive treatment. To improve, we discussed how to: manage paediatric trauma, ensure colloids and paediatric emergency physician availability, early inotropic initiation, activation of paediatric trauma and massive transfusion protocols, and paediatric resuscitation courses.

CONCLUSION

Case highlights the challenging paediatric major trauma in a rural hospital setting with limited resources. It is made benchmark in guiding local policy-making to optimizing workforce, to reduce morbidity and mortality in paediatric and improve rural emergency services.



OUR SPONSORS

Diamond Sponsor



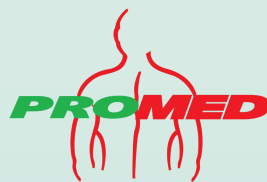
Platinum Sponsor



Gold Sponsor



Silver Sponsors



Bronze Sponsor



Pre-Congress Workshop Sponsor



REGISTRATION FEE

CONFERENCE PACKAGE

INTERNATIONAL

TYPE	EARLY BIRD TILL 30 APRIL 2026	STANDARD RATE
Doctors	USD 320 (MYR 1,350)	USD 420 (MYR 1,750)
Nurses / Paramedics / Medical Students	USD 200 (MYR 840)	USD 300 (MYR 1,250)

LOCAL

TYPE	EARLY BIRD TILL 30 APRIL 2026	STANDARD RATE
Specialist / Consultant	MYR 900	MYR 1,000
Medical Officers	MYR 700	MYR 800
Nurses / Paramedics / Medical Students	MYR 500	MYR 600

PRE-CONGRESS PACKAGE

LOCAL

TYPE	RATE
Advanced Life Support Instructor Course (ALSIC)	MYR 1,200
Basic Life Support Instructor Course (BLSIC)	MYR 1,000



VISIT PENANG

TOP PLACES TO VISIT

George Town & Heritage

GEORGETOWN UNESCO HISTORIC SITE

- Walking around the UNESCO heritage zone is a must. Includes street art, old shophouses, murals, and a cultural vibe.

LEONG SAN TONG KHOO KONGSI

- A stunning Chinese clan house with intricate architecture.

PINANG PERANAKAN MANSION

- History of Peranakan (Straits Chinese) culture and heritage.

CHEAH KONGSI TEMPLE

- Another beautiful historic clan house within walking distance.

LOVE LANE

- A lively lane with bars, cafes, and nightlife.

Fun & Unique Spots

THE TOP PENANG

- The tallest building complex with panoramic views and attractions.

UPSIDE DOWN MUSEUM

- Fun photo-op museum for all ages.



VISIT PENANG

TOP PLACES TO VISIT

Nature, Views & Adventure

PENANG HILL

- Hilltop views, cooler weather, and nature walks.

BOTANICAL GARDENS PENANG

- Lush greenery and relaxing walks.

ESCAPE PENANG

- Outdoor theme park with zip-lining and fun rides.

ENTOPIA BY PENANG BUTTERFLY FARM

- A beautiful butterfly sanctuary.

TROPICAL SPICE GARDEN

- Scenic spice gardens with trails.

Beaches & Waterfront

BATU FERRINGHI BEACH

- Popular beach for sunbathing, water sports, and night markets.

CLAN JETTIES OF PENANG & TAN JETTY

- Historic waterfront stilt houses unique to Penang culture.



VISIT PENANG



MUST-TRY FOOD & RESTAURANTS

Iconic Local Dishes

ASAM LAKSA

- A bold and tangy fish-based noodle soup with tamarind, fresh herbs, and a signature sour-spicy kick.
- Where to try: ***Penang Road Famous Laksa, Penang Air Itam Laksa***

CHAR KOAY TEOW

- Smoky stir-fried flat rice noodles cooked over high heat with prawns, egg, and savoury soy sauce.
- Where to try: ***Siam Road Charcoal Char Kuey Teow, Presgrave Street Ah Shen Duck Egg Char Koay Teow***

NASI LEMAK

- Fragrant coconut rice served with spicy sambal, anchovies, peanuts, and classic local sides.
- Where to try: ***Ali Nasi Lemak Daun Pisang***

CENDOL / CHENDUL

- A refreshing shaved-ice dessert with coconut milk, palm sugar syrup, and green jelly noodles.
- Where to try: ***Penang Road Famous Teochew Chendul***



VISIT PENANG



MUST-TRY FOOD & RESTAURANTS

Restaurants Worth Featuring

LAKSALICIOUS

- A well-known spot serving flavourful and authentic Penang-style laksa.

TINA'S KITCHEN

- A cosy restaurant specialising in traditional Nyonya Peranakan home-style dishes.

LAGENDA HOUSE & CAFE

- A stylish halal restaurant offering classic Malaysian flavours in a comfortable setting.

HWA TING RESTAURANT

- A popular local restaurant known for its consistent quality and crowd-favourite dishes.

FIREWOOD PENANG

- An upscale dining destination featuring wood-fired dishes in a refined atmosphere



TERMS & CONDITIONS

01 . INTRODUCTION

The Asia-Pacific Resuscitation Conference (APRC) is organised by the Malaysia Resuscitation Association (MyRES) in collaboration with the Penang Heart Safe Society (PHSS) (collectively referred to as the “Organiser”, “we”, “us”, or “our”). Welcome to the APRC website at www.aprc2026.penangheartsafe.org.my (the “Site”). References to the Site include all related platforms, including mobile websites and applications. By accessing, browsing, using the Site, or registering for the conference through the Site, you acknowledge that you have read, understood, and agreed to be bound by these Terms & Conditions. If you do not agree with any part of these Terms, you must discontinue use of the Site immediately.

02 . SCOPE OF TERMS

These Terms & Conditions incorporate by reference all applicable policies and guidelines available on the Site, including but not limited to the Privacy Policy, Cancellation & Attendance Policy, Refund Policy, and FAQs (collectively, the “Policies”). These Terms & Conditions and the Policies together constitute the entire agreement between you and the Organiser and supersede any prior agreements or understandings, whether written or oral. The Organiser reserves the right to amend these Terms at any time, and any updated version will take effect immediately upon publication on the Site.

03 . REGISTRATION AND ATTENDANCE

All registrations made through www.aprc2026.penangheartsafe.org.my are considered confirmed once payment has been successfully completed. Failure to attend the event without prior written notice shall be treated as a no-show, and no refund will be provided in such circumstances.

04 . CANCELLATION & ATTENDANCE POLICY

All fees paid are non-refundable. If a registered participant is unable to attend, a replacement attendee may be permitted on a case-by-case basis, provided the request is submitted in writing no later than one (1) month before the event and is subject to approval by the Organiser. All requests for attendance changes must be directed to aprc2026@penangheartsafe.org.my.



TERMS & CONDITIONS

05 . **REFUND POLICY**

Refunds, where applicable, are strictly subject to the conference's Cancellation & Attendance Policy. All cancellation requests must be submitted in writing and before the stated deadline, and administrative or processing fees may apply. Approved refunds will be processed approximately one (1) month after the event. Once initiated, refunds may take between two (2) to four (4) weeks to be credited back to the original payment method due to bank and payment processor timelines. The refundable amount, if any, will depend on factors such as the time of cancellation, applicable fees, and third-party service provider policies.

06 . **CHANGES OR CANCELLATION BY THE ORGANISER**

The Organiser reserves the right to amend, reschedule, or cancel any programme, session, speaker, or component of the event at any time. While every effort will be made to avoid major changes within seventy-two (72) hours of the event, such changes may occur due to unforeseen circumstances. In the event of a major change after registration, participants will be offered the option to accept the change or cancel their registration and receive a full refund of fees paid to the Organiser. The Organiser shall not be responsible for any additional costs or expenses incurred as a result of such changes.

07 . **GUARANTEED REGISTRATION**

All registrations made through the Site are guaranteed. In the event that a confirmed registration cannot be honoured on-site due to an error attributable to the Organiser or the Site, participants must notify the Organiser immediately at aprc2026@penangheartsafe.org.my. The Organiser will arrange an appropriate event pass and bear the full cost of the registration, including any applicable taxes or service charges.



TERMS & CONDITIONS

08 . **PAYMENT SECURITY**

All payments are processed securely through Razorpay, a payment gateway compliant with the Payment Card Industry Data Security Standard (PCI-DSS). Neither APRC nor Razorpay stores credit or debit card details. Payment data is encrypted and retained only for as long as necessary to complete the transaction in accordance with applicable security standards.

09 . **FEEDBACK, COMPLAINTS, AND SUGGESTIONS**

Any complaints regarding content, reviews, or materials published on the Site must be submitted in writing to aprc2026@penangheartsafe.org.my with sufficient information to enable investigation. The Organiser reserves the right to request additional information or identity verification where necessary. Complaints relating to the event should be reported promptly to allow timely assistance.

10 . **LIABILITY AND FORCE MAJEURE**

The Organiser does not accept responsibility for errors or omissions beyond its reasonable control. Liability is accepted only for proven acts or omissions of employees, agents, or subcontractors acting within the scope of their duties. The Organiser shall not be liable for any loss, damage, or expense arising from events beyond its control, including but not limited to acts of war, terrorism, civil unrest, industrial action, natural disasters, adverse weather conditions, government actions, or transport disruptions.

11 . **PARTICIPANT RESPONSIBILITY**

While every effort is made to ensure the accuracy of information provided on the Site, it is the participant's responsibility to verify personal registration details and to inform the Organiser in advance of any special requirements or services needed.



TERMS & CONDITIONS

12 . *PRIVACY AND DATA PROTECTION*

APRC is committed to protecting personal data in accordance with applicable data protection laws. Personal information is collected solely for legitimate event-related purposes and will not be sold, traded, or disclosed to third parties without consent, except where necessary to facilitate event operations. Credit and debit card details are never stored. Email addresses may be used to send registration confirmations, event updates, notifications, and related communications. Full details are available in the Privacy Policy, which forms an integral part of these Terms & Conditions.

13 . *CONTACT INFORMATION*

For any questions or enquiries relating to these Terms & Conditions, please contact the Organiser at aprc2026@penangheartsafe.org.my.

