

# Resuscitation Today

A Resource for all involved in the Teaching and Practice of Resuscitation

Supported by CPRO

## Waveform EtCO<sub>2</sub> that's perfect for emergency grab bags & 2015 ALS capnography compliance

### All Patient use

Adult/Paediatric  
Infant/Neonate



### Multi-Application

Intubated & Non intubated  
Effectiveness of CPR, ROSC...

### Comprehensive Alarms

Configurable alarms, Apnoea  
Blocked airway, Battery status

### High Performance NDIR

Accurate Infrared NDIR  
Efficacy of proof of intubation



**MEDACX**  
Technology you can trust



details on page 3

## In this issue

**Education** - Saving lives with Education

**Evidence** - Outcome after resuscitation beyond 30 minutes

**Evidence** - Outcomes of Basic Versus Advanced Life Support for Out-of-Hospital Medical Emergencies

## EMMA Capnograph

Waveform EtCO<sub>2</sub> - Respiratory rate - Alarms

[www.medacx.co.uk](http://www.medacx.co.uk)

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### EMMA Capnograph - portable waveform capnography from MEDACX

EMMA Capnograph second generation following the huge success of EMMA Capnometer introduced by MEDACX in 2006.

With over 10 years of proven application experience EMMA Capnograph builds on its reputation, now with its waveform display and breath by breath EtCO<sub>2</sub> and Respiratory Rate values plus a 'pulsing heart', it's the first choice in many hospitals, ambulance and emergency organisations in the United Kingdom, Europe and around the world.

October 2015: **European Resuscitation Council issued NEW 2015 ALS Guidelines<sup>1</sup>**, with particular emphasis on the *use of waveform capnography to confirm and continually monitor tracheal tube placement, quality of CPR and to provide an early indication of return of spontaneous circulation [ROSC]*.

EMMA Capnograph provides compliance to ALS guidelines and more... with clear and precise EtCO<sub>2</sub> waveform display together with EtCO<sub>2</sub> and Respiratory rate values opens up its use for *both intubated and non-intubated* and use on *Adult/ Paediatric through to Infant/Neonate patients*. Confirming efficacy of endotracheal tube placement; providing early recognition of ROSC, instant feedback of effectiveness of CPR, indication of Hypercapnia & Hypocapnia states. It is ideal for patient transfer and can be used with bags and face masks.

You can find more information about the MEDACX capnography range at: [www.medacx.co.uk/products/capnography](http://www.medacx.co.uk/products/capnography) [also see Outside back cover of this edition].

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**References:** <sup>1</sup>*European Resuscitation Council [ERC] - ERC Guidelines 2015*

## Resuscitation Today

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# EDITORS COMMENT

## Strengthening the links

**How many of us have considered the issue of patient safety in the context of resuscitation? For instance, the intervals of hands off time during a resuscitation attempt (pre-, peri- and post shock pauses) may not be recorded, but these have a serious impact on morbidity and mortality. Any interruption in chest compressions greater than 10 seconds compromises myocardial function and thus should be considered an adverse event.**

Unless the service in question utilises CPR feedback and performs individual case review of every cardiac arrest, this adverse event may never be identified, and many paramedics may not think to self-report this type of event as a patient safety issue. Would you? Does your service review every cardiac arrest case for identification of improvements?

Medication administration errors are also all too common in healthcare, and studies have shown they are more common in stressful situations. Given the high-stakes nature of resuscitation, it shouldn't be surprising that medication errors are another risk to patient safety. Effective teamwork and communication are other essential components in reducing the risk to patients.

How can we design for improvement in these areas? Measures such as resuscitation data review and cognitive offloading through the use of checklists, improving team choreography and implementing components of high-performance resuscitation have all been proven to improve performance.

All services should consider where they can not only improve the quality of care delivered during resuscitation attempts, but also where potential enhancements to patient safety can be identified. A structured approach to improving care in these types of situations has the potential to change the performance of an entire system, and ultimately the outcomes for patients. The focus should be on strengthening, where possible, each individual link of the chain of survival.

An example of one such approach is the OneLife project of the National Ambulance Service (NAS) in Ireland. Spearheaded by the Medical Directorate of NAS, the OneLife quality improvement project is focused on increasing cardiac arrest survival through a process of improving standards and increasing transparency.

It aims to achieve this through increasing community interaction and public education, enhancing call-taking and dispatch capacity, improving clinical capability at scene and refining the audit and research processes. It is an initiative that deserves to be applauded, and we look forward to seeing improved outcomes published over the coming years.

If your service is not currently doing so, consider implementing a structured approach to improving care and safety during resuscitation attempts. Remember, a chain is only as strong as its weakest link...

Until next time,

**Alan Batt**  
Editor

“All services should consider where they can not only improve the quality of care delivered during resuscitation attempts, but also where potential enhancements to patient safety can be identified.”