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# A Strive for Change



**Joe Heneghan** Editor, Ambulance Today

It is with some mixed emotions (a constant to and fro between stress and elation, worry and security, happiness and madness) and great changes that I've approached this edition of Ambulance Today. For myself and the rest of our small team here, it is an incredibly important issue. At the time of writing, it is just a little over three months since our editor, my father Declan, sadly passed from a coronary atheroma. This is our first edition without Dec, the man who embodied- the man who was-Ambulance Today. And, naturally, the next logical question is, 'Will it still be the same'?

The answer is, of course, no. It can never be the same, because Declan was this magazine. Many people who know me tell me that I'm very much like my father in a lot of ways, and that comes as little surprise to me to tell the truth. However, I also embrace the fact that it will not, and cannot, be the same. With difference comes change, and change is only as good or bad as you make it to be. My father and I were very similar in many ways indeed, and some those ways include work ethic and a principled passion to uphold the core beliefs of our work- namely, to work with leaders and innovators of EMS in order to instigate positive change for staff and patients alike.

That is what I have done, albeit to a lesser level (that of a very heavy-duty assistant maybe), alongside my father for roughly fifteen years now, give or take a little bit. And it is how I've approached this first edition of the magazine under my own name.

This edition brings together a collection of what I consider to be some of the most informed, intelligent, incisive, passionate, reasonable and understanding individuals at the top levels of international EMS that the globe has to offer. Of course, if I had my way, then the net would have been cast far wider. As I said, this collection features some of the people who I would describe in such a manner. I was thrilled to see how eager so many people were to partake in the short collection of interviews we have published in this

edition. Arrogant as it may sound, I was not surprised either though. My father didn't pour almost every waking hour of the greater portion of his professional life into this publication for it to simply stay as a run-of-the-mill trade magazine. We have progressed far, far beyond that in the years that have passed, with a global readership somewhere around 500,000 people and a very active presence in EMS and its development in various countries around the world. And we keep growing.

And it is this that I look forward to. With the many recent and sudden changes that have followed my father's passing, I have been reminded of one fundamental mode of survival. Adaptation. The amount of people who have come to me and my father in the past to tell us that print is dead, and that we should only focus on digital editions is uncountable. Whilst I'm pleased to note that we have obviously read the same conjectures penned in the Grauniad Weekend magazine, that simply isn't so. Be it on scrolls, parchment, books, or much later via the Gutenberg press, human writing (on paper) has existed for some 4,500 odd years (papyrus widely regarded as being the earliest form of paper). iPads have existed for 9. I'm not knocking it, I'm just saying pay attention to longevity. But, also, have a proper understanding of adaptation. Adapting is not changing everything for the new and leaving the old behind. Adapting properly is being able to recognise what portions of your approach need to grow or change. Print is far from dead- power cuts are still a thing and batteries diebut to strictly abide by it, in most (but not all) industries at least, is also equally resigning yourself to extinction.

So, it is in this spirit of innovation, and the betterment of EMS around the globe, that we are focusing now more than ever on our digital presence. That it isn't easy with our skeleton staff alongside the magazine, but we're very passionate about it and we have what we believe are some fantastic ideas on how to help all of you be heard that little bit clearer (from the dispatch staff, to the non-urgent PTS, to the CFR's, to the paramedics and everyone in between).

There isn't room to explain it all here-I've used it all to pontificate upon the evils of the modern digital world (my father was a self-professed troglodyte, and I told you we were similar) – but in the coming month or two I expect many of you will start to see us popping up a bit more on your phones, and your walls, and your twitterspheres. Ambulance Today is not some financial powerhouse and never has been. Recently described in the dulcet Mancunian tones of my colleague as "two men n' a dog under t' desk", we are only a powerhouse for representing the needs of staff and the communities they serve. So, when you see us pop up (and I am almost cringing at this, but I now finally understand it) do share us around. With every momentary share of an article, or invite towards your friends to like our page on Facebook, a great amount of people are given the chance to get in touch with us at any hour about anything they think needs to be heard. Or just seen. With every little share, you are giving each one of your genuine friends and colleagues a chance to speak up about something that maybe they have never uttered to you or anyone else before, for a variety of different personal worries or reasons. And that's a lot of people at the press of one button on your phone. Together, with your voices at the forefront, it is my belief that Ambulance Today can make great and positive differences in the years to come, just as my father has devoted himself and this magazine to for the past 18 years. Thankfully, we have an equally passionate and wide circle of innovators and leaders (most of whom have the same hands-on background as the dispatch and field staff reading this) who are our partners and trusted friends, and we all support each other in doing this. Our only drive being a genuine hunger to improve, and to offer a bit of care in return to the tireless carers who rarely ever put themselves first- you. If you like, you can read on and meet a few of those friends for yourself inside...

Joe Heneghan Editor, March 2019

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# P.7 UNISON Update: Keep Colm and Carry On!

An in-depth interview between Ambulance Today's editor Joseph Heneghan, former National Ambulance Officer, Alan Lofthouse, and current

National Ambulance Officer, Colm Porter. We discuss the developments that UNISON have pushed for and seen through over the past few years, and where it's all headed under the new management of Colm.



# Pp. 11-41 Focus on Global EMS

A series of eight interviews with some of the most highly regarded EMS veterans that the world of prehospital emergency and out of hospital care has to offer, featuring examinations of the

models in the UK, The Netherlands, Sweden, the USA, Israel, South Africa, Thailand, and Australia.



### P.42 From the Africa Desk: Case Presentation – Electrical Alternans in the Field

Mike Emmerich takes us through a rather nail-biting case study of an individual left at the mercy of bad luck,

long-distance transport in rough conditions and flight clearances.



### P. 44 Addressing Compassion Fatigue in the Ambulance Service Control Room

Founder of Red Lotus Consulting, Claire Hunter, explains how she has recently been implementing her mental health

workshops and training programs at South Central Ambulance Service (SCAS). Here she discusses the importance of Mental Health First Aid (MHFA), Mental Health Champions in Telephone Triage, and Compassion@Work Training.



**Next Issue: Summer 2019** 

# P. 46 Letter from America: Waiting on a Friend

Here renowned EMS expert Jerry Overton explains why technology and protocols, as great and as necessary as they are, can never replace people and skills.



### P. 48 Letter from Amsterdam: Accidents Are No Film Sets

Juan Cardona, Aaron Miranda and Our Dutch correspondent Thijs Gras philosophises upon the thinly

blurred lines between evolutionary inquisitiveness and outright rubbernecking, the annoyances and dangers of which Im sure more than a few of you are sadly familiar with...



# P.50 Focus on International Academies of Emergency Dispatch: ABCD...QRS!

IAED's Audrey Frazier gives an overview of the training that Yorkshire Ambulance's Clinical Development

Manager and Restart a Heart campaign founder, Jason Carlyon, has provided to over 105,000 secondary school children in Yorkshire.



### P.52 Focus on GVK EMRI India: Saving Lives in Ambulance Based Prehospital Care at 108 GVK EMRI, India

– A Unique Process Driven Approach Based on Working Definition Dr G.V. Ramana Rao MD explains how in India, GVK EMRI, have reduced morbidity and mortality rates across the country using the World Health Organisation's EMS and prehospital trauma care systems.

**Also inside:** Regular features from the National Academies of Emergency Medical Technicians, The Ambulance Staff Charity, Magen David Adom, Out & Abouts and our Products & Suppliers news section.

Give us your feedback on this edition by emailing to: joeambulancetoday@outlook.com

EDITOR: Joe Heneghan email: joeambulancetoday@outlook.com ASSISTANT EDITORS: Joe Smith and Harry Squire

CORRESPONDENCE: All correspondence should be sent to: The Editor, Ambulance Today, 41 Canning Street, Liverpool L8 7NN

FOR EDITORIAL CALL: +44 (0)151 708 8864 FOR ADVERTISING ENQUIRIES CALL: Advertising Sales Manager: Paul Ellis: +44 (0)151 703 0598 OR: +44 (0)7980 539 481

DESIGN & Production: L1 Media email: L1media@yahoo.co.uk

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**PUBLISHER'S STATEMENT:** Ambulance Today magazine is published by Ambulance Today Ltd, 41 Canning Street, Liverpool L8 7NN. The views and opinions expressed in this issue are not necessarily those of our Editor or Ambulance Today. No responsibility is accepted for omissions or errors. Every effort is made to ensure accuracy at all times. Advertisements placed in this publication marked "CRB Registered" with the organisation's "CRB Registration No," means that the Organisation/Company meets with the requirements in respect of exempted questions under the Rehabilitation of Offenders Act 1974. All applicants offered employment will be subject to a Criminal Record Check from the Criminal Records Bureau before appointment is confirmed. This will include details of cautions, reprimands or final warnings, as well as convictions and information held by the Department of Health and Education and Employment

5

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# **Keep Colm and Carry On!**

As Alan Lofthouse passes the torch on to Colm Porter as the national ambulance lead for UNISON, Ambulance Today takes a look at the progress made under Alan and where Colm thinks it's all headed...

Joe Heneghan (J.H): Alan, over the past few years you have spoken mostly about issues regarding staff retention, health and well-being, assault against NHS staff, and pay vs. work pressures and skills sets. One service which seems to me like it would have been a great compatriot of UNISON and other trade unions before it was abolished back in 2016 was that of NHS Protect. In the couple of years that have passed, have you found that the absence of this body has affected ambulance staff and the support you give them in any way?

Alan Lofthouse (A.L): NHS Protect had some very important functions which were simply abandoned in 2016 when the government pulled the plug. They had a role in national collection and analysis of violence data and inspection and some enforcement functions which were not allocated to another organisation. UNISON campaigned over this issue and our work with the Health Service Journal providing a national data set for the NHS in 2018 was instrumental in focusing system leaders on the gaps left when NHS Protect went.

We are now in a position where the new Secretary of State for Health has made commitments for a Violence Reduction Strategy. UNISON will continue to ensure NHS staff, including ambulance staff, have a voice in the strategy. Ambulance staff, along with some A&E staff, are at risk of a particular type of criminal violence from people abusing the system towards the staff trying to provide care. This is why we welcome the Assaults against Emergency Workers Act (2019) and would like to see proper evaluations of body cameras and whether they do act as a tool for prevention. However, there is a lot more that we think still needs to be done by employers in actively preventing assaults. It's not just about new legislation and body cameras!

J.H: That's a very good point, and an important one in my own opinion. Prevention is indeed a vital aspect in addressing assault against staff, but

doing so is also obviously incredibly difficult, as how can anyone know exactly when, where, or why the next assault will happen?

Would you like to see a similar body set up if our Treasury would ever fund something like that again or do you believe that the services NHS Protect offered can be met through work between trade unions such as UNISON and the Social Partnership Forum?

**A.L:** We don't want to see NHS Protect brought back into existence but we do need to ensure that their functions are assigned to other organisations. We need pressure on employers to continue and work on prevention and training to be a focus of the new Violence Reduction Strategy. This needs to be part of a system wide approach to ensure where employers are not fulfilling their duty of care to their staff, there is some form of sanction

The strategy will need funding and the SPF will need to be involved to get the buy in from employers and system leaders. It will also be a great place to share experiences and areas where innovation has led to improvements in supporting staff.

This could include better reporting, improvements in training, the physical and psychological support to staff, and even commitments by senior board level directors to take decisive action on violence and aggression.

J.H: On the note of violence and assault against staff, I know that you are a big believer in pre-emptive training – that potentially violent patients (or just members of the public) are too volatile and unpredictable, so the first and foremost way in avoiding these incidents is to train your staff in recognising signifiers of imminent assaults and how to de-escalate those situations before, or as, they arise. Do you feel that enough focus is currently being given to this and, if not, how do you think this could be improved?



Alan Lofthouse Former National Ambulance Officer, UNISON



Colm Porter lational Ambulance

**A.L:** As part of the strategy we hope that the provision of training is reviewed and an evidence base established on the efficacy of de-escalation and conflict resolution training. Certainly, the practice of delivering these training packages through e-learning seems particularly ineffective!

The very best training in the world won't always prevent an assault, especially if staff are exhausted and under pressure to deliver unrealistic performance targets. Our research with the HSJ showed some connection between performance metrics, the culture of organisations and levels of assaults. We think employers need to understand that their staff are human and for them to react rationally to a situation in the heat of the moment requires them to be calm and not stressed. This is an area where we think there is room for improvement, particularly around safe staffing levels.

J.H: Of course, when these incidents do sadly occur, this can often leave those workers involved traumatised to any level. This trauma can be difficult to spot, and can have devastating effects to the sufferer and those around them by the time it is identified. What is your opinion of current mental health support services and networks currently in place for ambulance staff?

**A.L:** The provision of mental health support is getting better but improvements are still needed. The other aspect that could be improved is training for managers to spot the changes in their staff and know when to direct them to support. Stigma around mental health continues to be an issue but is slowing starting to break down due to the work of Mind, UNISON, staff themselves and employers to tackle the issue

J.H: Whilst PTSD from cases of assault is a very serious and immediate problem in the ambulance industry, as it has been in the UK for decades, the problems they create can be compared to those caused by pressure upon services and their staff.

## **Unison Update**

Anxiety, burnout, and staff migration are all well-known products of overburdened, under-funded services where the most taxing solutions are often placed upon frontline staff (increased job responsibilities and heavier performance-related targets). This is a difficult and multi-faceted problem to approach, and one of the largest obstacles in fixing it is obviously the fact of too little funding, as it blocks staff from taking time off and encourages over-working, whilst simultaneously making pay raises which would reflect the added strain and responsibility unlikely to occur. To what extent do you expect the changes in the 2018-2021 NHS Pay Deal to help staff in their resilience, and to help services in retaining these absolutely vital workers?

A.L: The three year pay deal will go someway to helping staff deal with increasing cost of living. It also means that new starters will receive a higher rate of pay and reach the top of their pay band quicker. Pay is of course only one part of the solution but the agreement is there to help employers recruit and retain valuable staff. This also is why UNISON negotiated the paramedic banding agreement as it recognised, valued and recompensed the new responsibilities being pushed onto paramedics as well as the recruitment and retention problems facing the profession.

J.H: Is it just pay? How else do you believe we can fight the problems created by strain and over-burdened services? And how do you believe these other approaches/solutions to the problem should be implemented?

**A.L:** Pay is only part of the solution. More work is needed to deal with the increases in demand, and the lack of equivalent government funding is also a major contributing issue.

J.H: One final, and I personally feel much overlooked, contributing factor to the overall wellbeing of our staff and therefore also the patients they attend, is that of workplace bullying. Have you seen this as a major problem over the past few years at UNISON, or are levels of workplace bullying staying at a steady, and hopefully low, rate?

**A.L:** Bullying seems to be an endemic problem facing the NHS and the ambulance service is no exception. Old hierarchical systems and historically

male-orientated management structures have left a legacy in ambulance services. However, the problem is being confronted by a growing number of people from staff to senior managers. Accepting that there is a problem and challenging the old way of covering up unacceptable behaviour is a good start. The National Ambulance Strategic Partnership Forum and the National Social Partnership Forum have both done work on bullying including a Call to Action, advice to local partnership forums and guide to help challenge bullying. Even at employer level we have seen a move to review cultures and an acceptance that things need to change. Staff need to embrace these developments, reporting unacceptable behaviour and reflecting on their own interactions with colleagues. Empathy and compassion are two defining features of ambulance treatment. This must apply to colleagues as much as patients, and from all staff including management.

J.H: Following any experiences you may have had as the ambulance lead for UNISON in helping workers with these complaints, do you have any suggestions on how these issues should best be approached and dealt with? It's a tricky one, which I imagine does not have a one-size-fits all approach towards fixing it.

A.L: Yes! Deal with them guickly and as informally as possible. Get people talking and allowing people to express their feelings. Help those who are accused of bullying to reflect on their behaviours without appropriation of blame and encourage resolution and restoration through mutually acceptable outcomes. Mediation is a really good tool to do this. One thing employers need to do is set out clear standards for behaviour and then consistently uphold them. What is unacceptable for staff equally applies to senior managers who have a responsibility to lead by example. It is also important to separate out poor behaviour from totally unacceptable behaviour. There is no place in the modern ambulance service for bigotry whether that is in the form of sexism or racism. People found to be exhibiting those behaviours and victimising or harassing staff need to be dealt with formally and swiftly with a clear message that it will not be tolerated. Ambulance services have a way to go before staff from BAME groups have the

same chances at work including career progression.

J.H: Some very sound and logical points, Alan. I especially personally agree with you about maintaining the same standards and expectations for all, regardless of title or position. Any further advice to anyone reading this currently dealing with such problems?

A.L: Yes, get your trade union rep involved early on for advice and support. If you are not a member of a union join one before you have a problem. If there is no rep in your workplace then become one. Unions are only as strong as their members let them be. Don't wait for someone else to support their colleagues. Get involved, get training and start to support the changes you want to see happen.

J.H: The Ambulance Response Program (ARP) has recently come into formation within roughly the last year and a half or so. As you know, a very simplified explanation of its aims is to increase efficiency in how calls are triaged in order to reduce the amount of misplaced calls attended to as well as unnecessary burdens on the service. One extra hope has been that, by doing this, we should also see a noticeable reduction in the practice of 'clock-stopping' which can cause additional lasting health complaints to patients in many instances. It's very much early days to see any sort of real effect from the codes of practice the ARP has implemented, but have you seen a positive response from services? Do you think that sufficient training is being given to the correct staff about this relatively new program, and can you see the necessary cultural changes (such as more focus on clinical outcomes over performancerelated targets) being put in place which would likely be needed to support the protocols ARP has put in place?

**A.L:** I have previously described ARP as being like a new more efficient knife to spread the same pot of jam over an ever-increasing sized piece of toast! Depending on who you speak to, ARP has delivered some improvements however our members still report concerns with inappropriate triage of calls and there are still of course a number of performance targets that staff are managed over. However, the principle of triaging calls more robustly before committing an ambulance resource to the call are sound. I think more probably



needs to be done in the call centres to ensure staff have the right training and the right clinical support to respond to the changes to response times. The other thing that I think would be helpful would be greater integration with the rest of the Urgent and Emergency Care system. Privatisation of NHS 111 and Patient Transport Services has been a shambles. Bringing these together with GP services will provide the longer-term solutions needed to deliver the right treatment to patients first time.

J.H: Alan, that's an awful lot covered, I feel, but then there's been a considerable bit of development while you've been at the helm as National Ambulance Lead over the past few years. Thank you for your input and reflection. Moving onto the progression of these matters and any new ones on the horizon, let's see what Colm thinks.

Colm, we've spoken about pay, pressure on staff and staff retention, and assault on staff. Are there any areas or issues you see yourself as important which we've not spoken about?

Colm Porter (C.P): Although it's a long standing issue the retirement age for ambulance staff in is something that needs to be addressed. We now have a situation where anyone in the ambulance service aged 40 or below will not be able to claim their full pension until 68. It's simply unachievable to ask staff to work so late in their careers especially as demands on ambulance staff are increasing year on year. The strength of feeling among ambulance staff and the public on this issue was highlighted again recently when a UNISON member, Matt Fisher, from the London Ambulance Service started an online petition calling on the government to bring ambulance retirement age into line with other emergency services workers that was signed by over 300,000 people.

J.H: Yes, that is a good point and an area I had overlooked to be fair. You mentioned Matt Fisher, and the sad loss of his colleague and grandfather, Ian Canning, just three weeks after his retirement, is a damning example of something which people have been aware of for years, and which very little has actually been done about; namely that the mortality rate for ambulance staff upon retirement is unreasonable, and, many may say, callously high. Somewhere between 5 and 10 years more than others, depending upon

the type of emergency responder! For such a long-standing problem, I'm sure many staff will be happy to see that this matter is also so obviously important to you too. After all they give, it's not too much to ask for them to actually enjoy a portion of their life with their families, especially after their job has been more than thoroughly done.

**C.P:** Yes, the expectation of having ambulance staff work until they're 68 is something that strikes a particular personal chord with me. I've grown up around people who work in the ambulance service. My Dad is retired from the Dublin Fire Brigade where they also provide the ambulance service in Dublin. He worked as firefighter and an EMT for more than 30 years and was fortunate enough to retire at 55, but having worked in such a physically and mentally testing environment for so long he would have struggled to work another week let alone another 13 years!

J.H: Well, hopefully Matt's excellent work involving his petition will go some way to changing that! Whilst there is obviously still much work to be done to improve conditions for staff, obviously some things do change for the better. What do you see as having improved within the past 5 years or so?

**C.P:** UNISON'S successful campaign to get paramedics into band 6 was a massive achievement and just recognition for the job they do. Although nationally there's been no further movement on the agreement to review all ambulance roles, UNISON branches have been doing great work at a service level reviewing job descriptions and making sure staff are on a band that correctly reflects the jobs they do. Operationally, the service is moving from time based performance to more clinically based outcomes. Even though there's a long way to go on this, UNISON believes this is the best approach for patients and staff. Finally, it's great to see that the mental health of ambulance staff becoming a more prominent area that is being discussed across the ambulance services.

J.H: That's a lot of work, especially on the matter of pay bands. But where you are meeting resistance or atrophy on a national government level, I have to say from your answer that I respect the amount of work it must take to circumvent that on a service level in the meantime. And of course, you are right to note that topics revolving around mental health matters seem to finally be being given a little more attention in a more open and public manner. This is a very good step forward in our culture.

So, finally leading on from this I guess I should ask what you would like to see for ambulance staff in the years ahead? Is there anything particular you have in mind that you would like to achieve for ambulance staff?

**C.P:** Similar to the process that took place for paramedics there is a real need for other roles in the ambulance service such has Emergency Care Assistants, Dispatchers and Call Takers to be reviewed. It's evident that a number of jobs in the ambulance service have changed significantly in recent years and the band and levels of pay needs to reflect this.

J.H: Yes! That, Colm, is a very important observation to make. I won't venture a reason as to why, as I believe that they are many and varied, but there does seem to be somewhat of a culture of distraction for the ambulance community here in the UK. In the same way we get innocently distracted by long-term attention to emergency scenarios, sometimes giving less time than deserved to the analysis and protocol development of non-urgent response, we can also tend to just as innocently put more focus on some ambulance professions than others. The role of paramedic has undergone a lot of evolution in the past few years in our country, and (especially because this obviously requires so much care and attention) you're perfectly right to say that we need to keep an eye on the professions which carry equally important roles and which support those paramedics whilst that development is continued and made even stronger. If any one of the professions you mentioned were removed, the whole thing would obviously collapse. Therefore, it's equally obvious that they deserve the same level of respect and attention.

Colm and Alan, thank you both very much for your time. It's great to see such fluidity and understanding between you both on these topics as you hand the responsibility of dealing with these issues over between one another. I'll look forward to reading about further developments from UNISON in the years to come.

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Andy Newton

Prof. Andy Newton is a well know and highly regarded international consultant in all things EMS, from clinical governance and practise right through to regulation, governance and standards. Former Clinical director of SECAmb (whilst also holding many other key roles and positions within the EMS industry), he is currently the Immediate Past Chairman of the College of Paramedics, Trustee for the International College of Paramedics, Chairman of the HPA, a visiting Professor at Edgehill University where he is supporting the new Professional Doctorate Programme in emergency Services, and remains a consultant paramedic with post graduate specialist qualifications in urgent and critical care. He has received the Queen's Ambulance Medal in recognition of his services to EMS, and continues to push for innovation and positive change for staff and patients alike. We sat down and got his thoughts on the current standards of prehospital emergency care in the UK, and this is what he told us...

Joseph Heneghan (J.H): Andy, it's fair to say that the ambulance industry in many Western countries is a constantly evolving collection of professions, and exactly how these evolve from model to model and country to country can obviously have very vast and notable differences. Here in the UK, we've some massive progression in the roles and responsibilities of different ambulance staff. What would you say are the most pressing issues facing ambulance staff in the UK today?

Andy Newton (A.N): Firstly, I think that it is important to delineate paramedics (and ambulance staff) as a separate consideration from 'ambulance services,' or 'ambulance work' generally. Certainly, in terms of paramedics it

is no longer straightforward to align or equate this group of Allied Health Professionals solely in terms of operating in ambulances. The same may become true in the future for Associate Ambulance Practitioners and other grades of 'ambulance staff.'

In respect of challenges and notwithstanding the above, considering ambulance work first, their first fundamental difficultly is that paramedics are developing rapidly and increasingly independently of ambulance services, but ambulance services (both public and private) remain the single largest employer. Currently challenges include recruitment and retention, the latter due to the increasing range

of opportunities and the ever more challenging role of ambulance crews when employed in the conventional ambulance or ambulance service role.

Pay and conditions have not kept pace with the responsibilities and organisations have not been able to provide a support professional culture, thereby exacerbating staff shortages. The need to develop staff broadly and also to provide post-graduate opportunities for paramedics are often insufficient, as are opportunities for staff seeking to become paramedics. Many staff surveys from NHS Ambulance Trusts report a bullying culture, with poor organisational leadership, reflecting the generally over-performance driven approach of NHS institutions. These factors have been borne out by independent research and repeated governmental reports also identify organisational failings. This again leads to high levels of staff dissatisfaction and high staff turnover.

This situation is all the more concerning given the tremendous strides made by the paramedic profession, which elevated paramedics to independent practitioner status nearly two decades ago. It also stands in stark contrast with greater levels of public recognition around the important role of paramedic and ambulance personnel in the health sector.



# Focus on Global EMS: United Kingdom



J.H: Well, that first point is clearly an important and incisive one to make. I must confess that I'm not usually used to separating paramedics and ambulance services, but when you highlight such progression of the role through your description, it's a difficult notion to argue. Perhaps by recognising this difference, we as a community will be better prepared to put the systems in place we need to properly support these developments regarding different roles.

Regarding the other issues you mentioned – pay still lagging behind the complex roles and levels of responsibility, staff retention, bullying – are there currently any systems in place which give staff the support they need?

**A.N:** The paramedic profession and its professional body, the College of Paramedics (www.collegeofparamedics. co.uk) have advocated tirelessly to improve career development, educational standards, opportunities, together with working to improve the knowledge and consciousness of stakeholders. While also building layers of support and has a range of professional and legal support services. A recent example of support is the advent of Independent Prescribing for Paramedics and many more initiatives are underway, few of which would

have come to fruition without a strong professional body. The professional body also works closely with the national regulator, the Health and Care Professionsals Council (HCPC www. hcpc-uk.org) and the government.

Non-registered ambulance personnel can join a voluntary register, operated by Health Practice Associates (www.hpa-uk.org) which is in negotiation with the Professional Standards Agency (PSA) for full accreditation. It is working to provide the same sort of advocacy and support for these key staff, as the College has achieved for Paramedics. Some employers are working to support this and other initiatives relating to Professional Governance, and are working to create services that are modernised to meet the contemporary needs of patients and staff. The Ambulance Service Charity, TASC (www. theasc.org.uk) also has an important role to play.

J.H: Yes, a fair point to make. So really these are organisations of support more so than systems of support, but they are there for people to use. I can say very independently that care towards ambulance staff and paramedics, and a passion to see different roles in EMS fulfil their utmost potential, is certainly and obviously at the heart of the College. Similarly with TASC, the work

they do is amazing and selfless down to the very last degree.

These are excellent organisations, with a lot to offer in terms of staff support and advice, so I would urge any readers to use them if and when needed and to give your support wherever possible. That being said, no matter how hard a group works towards the betterment of others, there is always room to improve and go further forward. Can you see any areas which you would like to further build upon?

**A.N:** Arguably the biggest area for improvement is the working condition for Paramedics and ambulance personnel and this is largely the area of responsibility of employers. Although the NHS Ambulance Service is no longer a monopoly employer, it remains by far the largest single employer. It is therefore employers who have the greatest potential for improving the well-being and conditions of staff.

J.H: Indeed. I think that's a fair statement to make given your answers. There is only so much help you can give, and development you can initiate, from outside. Burdens upon staff which stem from long shifts and overwork etc. do come down to the employer, you're right. So, in such cases, where we are held to the conditions of our employers, can you see anything which you believe should be implemented (such as a piece of legislature, a new body or organisation, or even just a change in culture and attitude) which could further help this from outside a given organisation?

**A.N:** Legislation may be helpful in some cases, but perhaps more important is the strategy a government adopts in providing and delivering ambulance and other services provided by Paramedics and ambulance staff.

The recent NHS strategy document 'Long Term' plan (www.longtermplan. nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan.pdf) does recognise the role for paramedics, particularly in roles outside the ambulance service, such as in primary care (www.england.nhs.uk/gp/case-studies/paramedics-south-kent-coast/). However, more specific reports addressing the





need for the ambulance service to modernise, most recently the Carter Report: 'Unwarranted Variation in NHS Ambulance Trusts,' (www.improvement. nhs.uk/about-us/corporatepublications/publications/lord-cartersreview-unwarranted-variation-nhsambulance-trusts/) largely re-hash the finding of shortcomings identified in previous reports over the last two decades. This indicates that, while the level of strategic understanding is improving, a large implementation gap remains, with 'Groundhog Day' exhortations to sort out what should have been dealt with long ago. Such organisational failings do not bode well for the much needed organisational and cultural improvements that are needed.

J.H: So basically, getting legislation in place to approach the problems discussed is one thing, but further work needs to be done in learning how to actually implement that legislation effectively without any oversights or gaps. Otherwise, the problems either persist or, a little like an infection, partly remain and then start to grow back to their full strength all over again.

What do you think is actually the strongest aspect of how we implement pre-hospital emergency care here in the UK? Is it the model it is based upon, does it lie within training and education, or something entirely different in your opinion?

A.N: The UK has a very strong, well prepared and independently regulated paramedic profession, which has a positive national profile with the public it serves, and which has access to a well-conceived career framework and is in demand across the healthcare sector. It's now largely a graduate based profession with paramedics being fully recognised as Allied Health Professionals. Professional registration has had the effect of facilitating the movement of paramedics throughout the healthcare sector and has also stimulated the development of over 40 paramedic degree programme and many post-graduate specialist educational opportunities.

Arrangements for newly qualified paramedics to progress through a 'Newly Qualified Paramedic' status based on the system for 'Newly Qualified Teacher,' are also in the final stage of completion. Independent prescribing has been opted to suitably qualified individuals and the professional body ensures that the profile of the profession continues to be high with a range of supportive offers to members.

For those paramedics working in pre-hospital care, most work within the NHS ambulance service or in private providers, many of whom have contracts with the NHS. While the Ambulance Service has not developed at the same rate as paramedics, it is essentially a national service free

at the point of use, fully integrated into the wider NHS emergency care system. Pathways of care for most serious conditions, such as myocardial infarction, trauma, stroke, sepsis are well developed and this multiprofessional working is generally effective in meeting patient need. While much more needs to be done in terms of integrating with the range of needs for patients with nonlife-threatening conditions, patient outcomes are generally acceptable when compared with other first world health care systems.

J.H: So, paramedics being fully recognised as Allied Health Professionals, thereby allowing them to move across the healthcare system and opening up a range of new approaches to treatment, and the effect that professional registration has had on training and education would be the strongest point for you? I can see that as a very valid answer. After all, your foundations are key to whatever you're building- strong training and education is indeed a first and foremost, so the ways in which they have developed in the UK are beneficial in a multitude of obvious ways when you look at it.

Once again though, with every satisfactory result comes an improvement which could be made to make it even better. So how would you like to see services improve? What advancements would you like to see made?

**A.N:** Improvements in the well-being of staff, guaranteed opportunities for continuing professional development and much improved organisational leadership would be welcome. Paramedic scope of practice continues to develop in line with patient need, but there are still some opportunities to match the best available levels of practice.

J.H: And how about with technology? There have been a lot of exciting new products and developments in different pieces of kit. But is there anything really new and useful you would like to see which hasn't really been considered yet, something missing?



# Focus on Global EMS: United Kingdom



**A.N:** The lack of integrated (electronic) patient records is a major handicap and prevents the ability of individuals to establish the outcome of patients they have treated. Given that feedback is a condition of learning this is a barrier to safe and effective practice, which only exists due to the generally poor levels of IT infrastructure in the NHS and failures around the development of effective information sharing arrangements. Where these factors have been overcome, they facilitate higher standards of care and enhance learning.

New technologies, including ultrasound and Point of Care Testing, have not been widely introduced and triage tools for trauma, stroke and other conditions either lack the necessary sensitivity and specificity or do not yet exist, for example in the detection of aneurysm. The wider introduction of these technologies and improvements in IT and triage tools would be of great potential value. All conducted in the context of service evaluation and research.

J.H: All worthy of a good bit of development and focus, it seems. Especially the integrated patient records, I would say. There would seem to be a wealth of potential there and one would assume it would also hold benefits for patients too.

What, in your opinion, is currently the largest socio-economic burden upon ambulance services in the UK? For clarity, I'm thinking of drug and alcohol abuse, nuisance calls, funding cuts which lead to inadequate kit or vehicles perhaps, recruitment and community relations. These types of things...

A.N: Paramedic practice and Ambulance and Emergency Medical Services operate in the socio-economic and cultural context of the nations and communities they service. Health experience is shaped by these factors and 999 call volume is higher per unit population than for example in Scandinavian countries. Logically, such differences are therefore the product to some degree of inequality, austerity and difference in educational, wealth and in both the design of state health care delivery and in the presence or absence of social networks.

There are also a range of epidemiological factors, most obviously related to an aging population and a complex range of well-established other factors. Of all these influences the design of the health care system itself is the easiest to modify, modifying individual and community behaviour is possible through education aimed at disease prevention and optimal use of existing services is possible, but requires a sustained long-term effort of a type rarely witnessed in the UK. However, one recent example of adding CPR training to the national school curriculum is the type of promising initiative. Other, often more local projects, such as 'safe drive stay alive' educational for young adults, which discourages alcohol and drug use when driving, work to reduce knife crime and the identification of frequent callers and many other similar efforts show great promise in helping to work productively with the wider community.

J.H: That's a very good perspective on it. Socio-economic burdens to staff will be so ingrained in culture, that to fix these problems, or even alleviate them, is a mammoth task in itself. So, if a service suffers a burden from a notably high call-rate from drunks, for instance, it would be easier to adapt your EMS model to tackle this problem with more certainty than it would to try to change the socio-economic background of the community you serve. I was about to ask the best way to tackle these problems, but I have to say that, personally, I think your perspective on it is totally correct. These types of social problems have existed as long as societies have to be fair, so I believe you're quite right to say we should adapt the model to the community, rather than take on the almost impossible task of reducing these problems in society.

Moving slightly on from this, how do you see relations between staff and the general public they serve?

A.N: It's difficult to answer this question without data addressing the specific point. However, generally the relationship with the UK public is positive, as evidenced in countless documentaries visible nightly on most television channels. Nevertheless, there will always be some sections of the community who, for whatever reason ('disinhibition through the use of drugs and alcohol," 'organic or mental health issues' and other factors), create risks to responding personnel. Traumatic as they are, these risks can thankfully be managed in good systems and processes are in place to address them when they do arise here in the UK.

J.H: Are there any roles currently undertaken by paramedics which you would either like to see expanded upon, or to perhaps have help from other parts of the health chain?

**A.N:** The current Paramedic Career Framework recognises a range of practice development opportunities in primary and critical care. Advanced training in what is broadly 'rescue' related care, through the work of Hazardous Area Response Teams, is also available. Opportunities also exist with the acute hospital sector, in education, research and management. It is regrettable that there are less







paramedic appointments to Ambulance Trusts and other NHS Boards that would be expected, and this is a surprising failure that has yet to be addressed. For example, while there are statutory board positions for a medical and nursing director there is no similar statutory requirement for a paramedic. This needs to change.

Clinically, the area of mental health training and education and the opening of 'Approved Mental Health Professional,' AMHP to Paramedics is needed. There are also some scope of practice changes that are needed for paramedics, including those working in both primary and critical care roles that would be helpful to address unmet patient need with the management of 'acute behavioural disturbance,' ABC, being well overdue for attention.

J.H: That, I could not agree more with Andy. To have someone representing paramedics on each board is an obvious must, but this is also known to be common in pretty much every industry. What they could offer in terms of knowledge, understanding, and incisive viewpoints towards further development and problem solving would be invaluable. Similarly, when it is true that a sizeable amount of calls will statistically and unavoidably concern individuals suffering from mental health problems, AMHP for paramedics would seem like a very sensible move.

Aside from relations with the public, how do you perceive relations between our ambulance services and the trade unions representing those workers?

**A.N:** Trade Unions have a key role to play in negotiating improvements in the pay and conditions of all staff. 'Creative differences' can be a factor but can be managed by reasonable organisations and a shared commitment to improving the quality of care for patients and of well-being for all staff. The Provision of Trade Union on Ambulance Trust Boards would be worthy of consideration.

J.H: True, actually. That's another one that would most likely be quite welcome alongside a paramedic appointee. I just mentioned increased development and problem-solving probably being a happy by-product of that. What then, in your opinion, is the most important thing for innovators of ambulance to keep at the forefront of their mind when implementing change to pre-hospital care?

**A.N:** If I could address this point by point for simplicity's sake, then I would personally say that the following are key factors to bear in mind:

- The evolving capability of paramedics and all ambulance personnel and the need to match this against the needs of patients.
- The need to maintain a strong and independent Professional Body for paramedics
- It is highly desirable that nonparamedic personnel take part and are supported in joining a 'voluntary register' of the type developed by HPA
- The need to modernise the Concept of Operation' (CONOP) for the delivery of ambulance services.
- A commitment to good leadership and governance conducted in an honest and open manner.
- A recognition that while the UK has generally a very effective workforce and relatively effective ambulance service, this situation has been brought about through a range of factors.
- Further revision to response time and other commissioning metrics, which need to focus more on patient outcome and system efficiency.
- More cooperation and co-ordinational across the health care sector.

- A firm commitment to evaluation, research and continuous quality improvement and supporting a professional culture that supports dignity at work.
- More support for all ambulance staff, in terms of improved conditions, access to education and training, together with the promotion of more staff-friendly organisational cultures.
- Ensure appropriately qualified and experienced paramedics are on all NHS Trust Boards.



- Discourage employers from overly referring staff to the regulator and treating the Heath and Care Professions Council, HCPC, as a repository of matters that can be dealt with internally. The HCPC is not a 'prosecution service' for the employer.
- More courage from leaders.
- J.H: All good foundations for change and innovation to build upon. To finish, if you could see one change take place within the next 5 years for your service, what would that be?

**A.N:** This one is easy. Simply an improved organisational working environment for all paramedic and ambulance staff. Approaching that topic would take up more space than we have today.

J.H: Andy, thank you very much for your time and insight. I hope this gives our readers as much to think about as it did for me, hopefully with some nice little ideas to consider employing too, you never know.

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Thiis Gras

Thijs Gras has worked in the busy and bustling streets of Amsterdam as an Ambulance Nurse (or ambulance verpleegkundige) for 23 years now, following six years as a nurse specialising in emergency cardiology. With an academic background in medieval history, Thijs has used his passion to become a leading authority on the history of ambulance around Europe, specialising in the history of Dutch ambulance. At the same time, he has also spent 13 of those 23 years also working as a dispatcher in Ambulance Amsterdam's control room. Aside from this, he is active in the Dutch Nursing Association, is an editor for a Dutch ambulance-focused trade magazine, and a regular contributor to another national magazine dedicated to specialised nurses. His academic nature, and his impressive capabilities in EMS have made him one of The Netherlands', and indeed Europe's, leading ambulance experts. We get his take on the EMS model in The Netherlands, how it can be improved, and what we can learn from its strengths...

Joe Heneghan (J.H): EMS is a bit of a sprawling creature when it comes to industries. There are many factors which feed into it and change its nature, and the environment that shapes it is being constantly affected and changing as a result of the very outcomes it produces. So, one can safely assume that the number of issues which are considered most pressing in order to ensure its effective and safe delivery are both numerate and distinct from one another.

What would you say are the most pressing issues facing ambulance staff in your country today?

Thijs Gras (T.G): Well there are, of course, many different issues that press our services in such a divergent and complex working field as ours. For me, I would probably say that we have a handful of immediately pressing matters. First and foremost, we have shortages in our specialised nurses at the moment, and in addition to this we are also seeing a growing differentiation in ambulance care levels too.

Equally, we can see a growing concentration and differentiation of hospitals. I think the final two things which would probably press us the most with equal urgency are a growing complexity in patient situations,

especially elderly people at home, and uncertainties concerning the implications of a new law which shall be passed for ambulance care in 2020.

J.H: Is there anything currently in place which gives staff support regarding these issues?

**T.G:** Well, unions are trying to improve wages. This could help with staff retention. In conjunction with this, the government is busy expanding the number of students in A&E nursing as well, and one would expect that this should help to abate the strain of staff migration.

J.H: Well, that's certainly something. And personally, I can never disagree with promoting the roles of emergency workers to the general public and increasing interest in the work you all do. With regards to the unions and the attempts at staff retention you mentioned above, can you see any room for improvement in their approaches?

**T.G:** Personally, I would suggest placing more effort in promoting these sorts of roles to schoolchildren. Develop an interest in people at a formative stage, which would also further promote kind and caring, or even nurturing, personality traits in children. I would assume that this would raise figures in applications for nursing studies.

I also see some interesting developments in providing a broad specialisation for nurses who finished their basic nursing training (4 years). Now we let them follow a specialisation like Intensive Care and A&E nursing, but it may be possible to provide for a shorter route, though I think being a nurse is a very important base.

J.H: Going back, you mentioned earlier some concerns over a new law you just mentioned, which should take effect by 2020?



Thijs assisting a Medical Student

**T.G:** Yes indeed. Although the level of care aimed for remains at the high standard we want it to have, the main concern is about the tender. From what we see in other countries, this leads to uncertainties for both staff and management. Although competition can have benefits, it also takes up a lot of time, energy and money that can better be spent on care, and it hampers planning for the future. The concern is the possible division between emergency and non-emergency work. I feel this is important for many reasons. It provides a logistical and emotional buffer and allows high quality of care also for seemingly not so complex situations.

J.H: Yes, non-emergency care is something you have been quite open about either putting more focus on, or reminding others of the need to maintain any high levels of focus and attention which are already in place. That would be a very important one to keep an eye on, as I hear an awful lot from people from a great spread of different countries, that non-urgent care is definitely one which sometimes innocently falls down the list of priorities and, therefore, attention towards those patients is diminished as a result. Moving away from obstacles to EMS and their solutions, what do you think is the strongest aspect of how your country implements pre-hospital emergency care?

**T.G:** I think we have a very cost effective system with a high quality of care, so our EMS model is our strength, really. This structure, certainly to me, seems to be the most efficient for our needs here in the Netherlands.

# J.H: How would you like to see your service improve? What advancements would you like to see made?

**T.G:** Well, for one I would love to see even stronger links with allied health care professionals. We have some strong links and paths of communication already, but this can always be improved. And, of course our professions are continuously evolving and changing with time, so we have to take care that our working relationships and communications also evolve alongside that.

I would also love to see the implementation of Health Care Control rooms for all primary emergency care.

They have a much broader scope than the usual set up of a control room, and not only deal strictly with ambulance care, but also with emergency family doctor's care, emergency psychiatry situations and even home care emergencies.

J.H: And on the subject of advancements and innovations... what about technology? Have there been any advancements in technology within



Thijs with Fire Officer and cousin, Rik Jonkman

# the past 5 years which you see as particularly beneficial, new, or exciting?

T.G: There are some fields where innovations can be made. Regarding immediate patient care, one sees developments like portable echo and blood transfusion. For us, electrical stretchers are practical. One could look into providing hospital care into homes, so care comes to the people and not the other way round. We train some specialised nurses in giving pain blocks at home. In some regions, nurses take blood samples for troponins; combined with other findings this can lead to many people who you can leave safely at home. In data, we would like to have access to patient files so we know their medical history, but it will also be good for family doctors to know our findings when we visit some of their patients. Since recently we are able to send our reports to them in case we leave someone at home. We could also improve planning by using mathematical and statistical scientific research. I've already mentioned the health care control room, which I see as an innovation.

J.H: That, Thijs, is a lot of food for thought. And it seems there is a definitely a calling for integrated patient records across a variety of different countries. Leading on from this, if you could create a new bit of technology, no matter how fantastical or unrealistic, what would you like to see? For what practice would it be used and how would it help staff or patients?

**T.G:** I would love to see something which offers the possibility to run a few simple blood tests, with the aim of leaving patients safely at home, instead of needlessly running them to hospital. To me this would obviously be much better for the patient's comfort and overall condition, but I would imagine that it also has to be much more efficient and cost effective.

Furthermore, on the issue of patient comfort, the other advancement I would like to see is actually very realistic and attainable. Simply better suspension for a smoother and more comfortable ride for our patients, especially for those who are in great amounts of physical pain.

J.H: What, in your opinion, is currently the largest burden upon ambulance services in your country? This could be social or political, but I'm thinking specifically of external factors, such as lack of funding or social issues.

**T.G:** Well, as mentioned earlier, staff shortages and retention are a problem, especially where specialised nurses are concerned. Additionally, the closure of some hospitals and their concentrations into new locations has notably increased drive times, which has obvious implications on the job. And finally, very closely linked to this, I also see the closure of A&E departments as a problem- once they reach a level which is simply too demanding, they will sometimes call for a stop of ambulance admissions. This is not to say that I do not understand it, of course I do. But it is none-theless problematic when attempting to efficiently deliver EMS to your local community, that much has to be admitted.

# J.H: Can you see any creative way around this or, in the case of closures of hospitals and temporary closures of A&E, is it just a question of funding for more treatment centres?

**T.G:** Well, they have to deal with staff shortages too, but there is certainly room for internal improvement. We see that the threshold in some A&E teams to call a stop is lower than in other teams. And a lot of care or examinations may not be necessary, but are done to be (claim) defensive. People seldom realise that not wanting to run any risk is risky in other aspects. Think of iatrogenic complications, over treatment, spilled money, time and energy. Medical art differs from medical science. It is the art to apply medical science to the individual in his or her individual situation. This is not just about facts and figures, about evidencebased medicine, this goes beyond.

# J.H: How do The Netherlands actually attempt to combat these burdens we have been discussing?

**T.G:** There are two main strategies, both of which I am critical about. One is differentiation of care. Up to a certain level this can help to cope



Thijs working with a Medical Student

with increase in demand of care, but I think we reached the point where differentiation leads to inefficiency and blurred transparency. The other is the introduction of new personnel like basic doctors and Bachelors Medical Care (comparable to advanced paramedics), so people without a nursing background. I think to be a nurse is a very important feature of our work, because 80% of it is nursing. One might argue that a lot of nursing activities, like washing patients, are of no use on the ambulance, but I do not agree. I think that by washing patients you learn very well how to deal with sick patients: how do you approach them, what do you say, how do you say it? In nursing you learn how to deal with people (and their loved ones) who have just received bad news about their medical situation. Besides, by being a nurse there are a lot of alternative working possibilities should you want, or be forced, to step out of the ambulance service.

J.H: What are the relations like between your staff and the general public who you serve? Are ambulance staff respected in your country, or is there a noticeable threat of assault against staff and theft from vehicles?

**T.G:** This is not really a big issue anymore, although some incidents

do happen. People are generally very positive about ambulance personnel. We should be well aware of the importance of our neutrality in this respect, so people see us as nurses and healthcare professionals, not policemen or associated with the government.

J.H: Ah- you are, of course, talking about recent moves over the last few years which would see shared control rooms between ambulance and police. Where this has been so far implemented, what have the observable effects of these mergers been that you can see?

**T.G:** It is difficult for me to tell, but I would like to refer to one of my columns I wrote recently (Spring 2018): 'Till death do us part'.

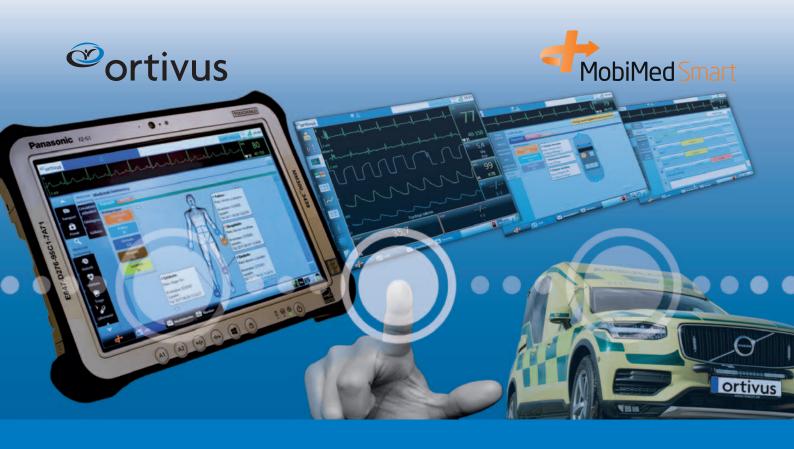
J.H: Actually, yes. That article does address that topic perfectly to be fair. You used an excellent example of the ambulance being called to a murder scene where the caller was also the suspect, and how both police and ambulance services had very good and very fair reasons for either disclosing that call, or for keeping it confidential.

Are there any roles currently undertaken by ambulance staff in The Netherlands which you would either like to see expanded upon, or to perhaps have help from other parts of the health chain?

**T.G:** I would love to see more attention given to the advancement of triage in the control room. Other than that, I think we can improve in providing care at home so we prevent people from going to hospitals. Do not forget there are nasty diseases and nasty viruses and bacteria in hospitals and you do not want to unnecessarily expose your loved ones to them!

Another item related to this, would be to expand possibilities for placing patients who are too good for the hospital but not good enough to go home. This applies especially to elderly and psychiatric patients.

J.H: Well, I can only say that to me they actually sound like very sensible, cost-cutting suggestions which would probably greatly improve patient



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experience (especially for the elderly) and lessen demands and strain in general on hospitals.

Moving on, what are relations like between your ambulance services and trade unions representing your workers?

**T.G:** These relations are actually generally not so good. Part of the problem is we have two unions, so employers can employ the Roman tactic of 'divida et impera' and these unions fail to draw one line. Another problem is that, in the case of either of these two unions, not everybody is a member. So even in this way, you can see that staff themselves are also not completely unified.

J.H: Well, I'm not even going to try and address that one with a simple twosentence summary. It's an article in itself just introducing how to address

those issues. It clearly needs some attention though, either from both of the unions, the workers, or preferably all of them together. Speaking of a clear need for change, what, in your opinion, is the most important thing for innovators of ambulance to keep at the forefront of their mind when implementing change to pre-hospital care?

**T.G:** First of all, we all like to state that the patients' interests are in the forefront of our minds. In many cases though, this is a hollow phrase; for in the end, managers, politicians, health insurance companies and the like, are unfortunately masters in safeguarding their own interests.

But I think that by strengthening the chain of care, largely through better cooperation and coordination, we can really put the patients' interests at the forefront. The other aspect is to have an open eye for us personnel. We are the main capital, so do not choke us with rules and regulations, but instead let us perform our medical and nursing art, of course backed up by good medical and nursing science and an effective surveillance from the Health Inspection.

J.H: If you could see one change take place within the next 5 years for services in The Netherlands, what would that be?

**T.G:** I really do think that it is time to change the triage model, so that some way is opened for us to move away from the fixation that we should be on the scene in every 'lights-and-sirens'emergency within 15 minutes. There have been enough studies around the world to show that targets based upon response times, whilst on the surface seeming like a logical response to an emergency situation, actually do little to aid the situation and increase the burden on staff and services alike- an opinion based on facts and studies which has been vocalised far and wide for many years now, across a variety of different EMS systems in different countries.

J.H: Thijs, thanks for taking the time to share your opinions on ambulance provision in The Netherlands. I'm sure you'll agree, it's only a very light overview and just begins to scratch the surface of what could be much deeper and very interesting topics of conversation, but this, at least for me, was a very enjoyable look at how effectively EMS is being delivered in your country. I look forward to seeing how it develops even further from here!



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Jerry Overton

Currently sitting as President of the International Academies of Emergency Dispatch (IAED, an organisation which sets standards, establishes curriculum, and conducts research for public safety dispatch worldwide), Jerry Overton holds a well-respected and internationally-known knowledge of global EMS. He was previously the C.E.O. of the Richmond Ambulance Authority (RAA) in Virginia for 18 years, and has also served as the Chief Executive for EMS provision in Kansas City, Missouri. He has provided technical assistance for EMS models in North America, Europe, Asia, Africa, and, perhaps not so well known, was also responsible for the design and implementation for an Emergency Medical Transport program during the Bosnia-Hercegovina war. Past president of the American Ambulance Association, former Chief Financial Officer for the World Association of Disaster and Emergency Medicine... the list just keeps going on. We asked for his two cents on EMS in America, and here's what we got...

Joe Heneghan (J.H): When approaching the ways in which to improve deliverance of effective EMS, it's fair to say that identifying the largest barriers to such delivery can quickly become fairly murky. After all, issues can be encountered out on the field. confusion can come from unclear or complicated calls to dispatch and how they are perceived and then reported, and of course- even with the best of intentions from the most supportive of managers- effective management of the many issues facing an EMS system is always a juggling act to try and please everyone all of the time.

If you could identify just one of the most common obstacles that you encounter in ensuring your service can effectively deliver EMS to your community, what would that obstacle be and where does it come from?

Jerry Overton (J.O): Lack of resources; human and financial. Rising demand and the higher percentage of lower acuity requests have placed the delivery of effective and efficient EMS at risk. This combination has two undesired impacts. The rising demand, of course, requires additional resources, which simply is not available in today's EMS system.

The lower acuity patient challenge is not as obvious. Typically, the



Citizen CPR

interaction with the lower acuity patient takes longer, both at the scene during the assessment and at the hospital during the transfer of care. This saps resources from the higher acuity patient needing a quick response time.

J.H: Is there currently any strategy in place to deal with these obstacles?

**J.O:** Telephone triage, different means of transportation, and alternative

destinations can all be strategies that help. However, the more we travel down this road, the more we are exposing the patients to risk. To assure that risk is minimized, outcome evidence is needed, and that strategy is all too often forgotten.

J.H: Is there anything which you believe should be implemented, such as a piece of legislature, a new body or organisation, or even just a change in culture and attitude, which you feel

### Focus on Global EMS: United States of America

# would improve standards for your service and/or the patients?

J.O: In the US especially, a legislative change is needed to at least begin the change. When the Medicare law was passed in 1965 (yes, almost 45 years ago) it required transportation if payment was to be received by EMS. Since approximately 40 to 45 percent of our patients are over 65, and payment is derived from Medicare, all patients will be transported because that is the incentive. Acuity makes little difference. This is completely ludicrous.

Secondly, in the US, we need a cultural shift. Today, EMS is NOT public safety, it is health care. When that is truly understood, we can move forward.

J.H: What do you think is the strongest aspect of how the US implements pre-hospital emergency care? Is it the model it is based upon, or does it lie within training and education, clinical performance etc.?

**J.O:** With the diversity of systems, and fragmentation, it is clearly not the model. In comparison to the UK and Australia, we are behind in both education and clinical performance. Next question please!!!

J.H: Haha, fair enough. Every country has room for improvement, that much

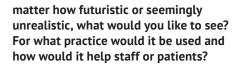
is undeniable by any one of us. Some countries look to their neighbours to see where and how they can improve, but at the same time those same countries will undoubtedly have their own different ways of doing things which we can learn from too. However, moving on as you said: how would you like to see your service improve? What advancements would you like to see made?

J.O: Returning to my answer for your third question, we need to understand that we are an integral part of the overall health care system. We are gatekeepers. We need to change, period. Once the culture is changed, we can rapidly advance.

J.H: And have there been any advancements in technology within the past 5 years which you see as particularly beneficial, new, or exciting?

**J.O:** This is truly an interesting question and the answer may be a surprise. It is "not really."

J.H: Once again, fair enough. I would personally say that maybe that's a sign for some attention to be given here in the US EMS industry. The need must be there for new pieces of kit, and we certainly have the technology. Following this thought, if you could create a new bit of technology, no



J.O: In-home video and health care sensors that would automatically monitor and download all aspects of a patient's physical, emotional and social health. Upon calling 999, or 911, or 112, the data from the sensors would automatically populate corresponding fields in the call-taking software, providing specific information that would aid in establishing the best response for the patient.

J.H: I like that one, very much. I think the discussion over the effects that could have on the whole EMS delivery system would certainly be an interesting, deep, and complicated one.

I think it is both fair and sensible to conjecture that each and every country has notable social issues to face when employing a safe and effective EMS system.

What, in your opinion, is currently the largest social burden upon EMS services in the US?

J.O: In the US we have an unprecedented problem with overdoses that fortunately, at this point anyway, has not impacted other countries. As I write this, the situation with oxycodone is epidemic. Access to care is a close second. Calling for an ambulance gets a patient seen in the A&E much quicker and the public knows it.

# J.H: Is there already anything in place to counteract this?

**J.O:** As to the overdose problem, model programs are now in place in several states and they seem to have started to make a difference.

The access problem remains and as answered earlier, until the legislation is changed and incentives for transportation are changed to incentives for the best and most appropriate resource for the patient, we will continue to struggle.

J.H: Yes, that's a very tough one indeed. I've seen some EMS models which deal with this very well, and the Dutch are a



CAD Screens

### Focus on Global EMS: United States of America



good example of that. Whether or not a system which steers away nuisance calls was introduced at an early stage, as I would suspect, or if it was somehow cleverly introduced at a later stage, I do not know. Also, the population is vastly smaller than that of the US which is another factor to consider.

How about relations between EMS services and the general public they serve? Are ambulance staff respected in your country, or is there a noticeable threat of assault against staff and theft from vehicles?

J.O: That is two different questions. The general public does respect EMS and the paramedics that serve them. The recent, different television programs, as those on BBC, have more accurately portrayed the life of a paramedic and the challenges faced.

However, that does not mean that the threat of assault does not exist. And, unfortunately, it is in many cases where it's more than a threat that the assault happens. Recent peer reviewed articles prove that there is a rise and that the percentage of paramedics assaulted is, frankly, alarming.

J.H: Recently in the UK we have passed the Assaults on Emergency Worker (Offences) Act 2018, which basically sees that assaults against emergency workers (obviously including all those working in prehospital emergency care) are seen as tantamount to an attack upon the State, rather than as an offence against an individual victim. How are assaults against ambulance field staff treated in your country? Are there severe deterrents in place to dissuade others who might attack staff working on an ambulance, or would you like to see some improvement in penalties for such assaults?

**J.O:** Typically, an assault is prosecuted to the fullest, like that of an assault on a law enforcement officer of fire fighter. It is not tolerated.

J.H: And, as everything must have a balance, with every obstacle that arises from a sociological perspective, there's always its political counterpart waiting eagerly right next to it. Lack of funding for vehicles and/or new kit, a lack governmental support for worker's rights and safety, a lack of emphasis on the funding for training— the different issues which any country may face from the State that governs it are endless and well known to us all.

Bearing in mind that issues which primarily effect staff also indirectly but notably affect the patients, so these can be included too, what seems to you to be the biggest political hindrance in delivering the most effective EMS possible to your community?

J.O: In today's world of competing priorities, EMS is all too often the loser. Compared to education, infrastructure, social services, retirement funds, and even the in-hospital portion of the health care system, EMS is but a small part of the overall governmental budgetary needs. That, combined with the fact that EMS has a VERY small constituent base, is problematic. EMS matters, but the challenge is convincing politicians that it matters.



Autopulse

J.H: Are there any roles currently undertaken by your ambulance staff which you would either like to see expanded upon or, inversely, to perhaps receive help, or partnership, from other parts of the health chain?

**J.O:** The key word in the question is "partnership." How gratifying it would be if "the other parts of the health care chain" did recognize each other as equals.

J.H: And, keeping on the subject of relations for the moment, what are relations like between your ambulance services and the trade unions representing your workers?

**J.O:** Because of the fragmentation of EMS agencies, it would be specific to that agency and the leadership.

J.H: Fair enough in that case; I can appreciate how that would make it very difficult, if not realistically impossible, to give an accurate impression of those relationships then.

Moving on, what, in your opinion, is the most important thing for innovators of ambulance to keep at the forefront of their mind when implementing change to pre-hospital care?

J.O: We need an evidence base to make the changes. We cannot be afraid of data, we need data, especially outcome data. If we are to partner, if we are to integrate, if we are to be risk averse and expand our scope, we need to know what the hell we are doing and how the hell we are making a difference. That requires evidence and an evidence-based approach.

J.H: Finally, the greatest changes can come from the most subtle and surprising beginnings. Equally, they can also come from the bloody massive obstacles staring you directly in the face! If you could see one change take place within the next 5 years for your service, what would that be?

J.O: Based on the last five years, I am concerned about the next five years. The change most needed is the recognition of the crucial roles of the call taker and paramedic and all of the EMS work force in a truly integrated health care system. The continuum of care starts with EMS. If our communities, our public, our politicians, and even our patients understood and accepted that as a fact, what a change it would be.

J.H: Very well put Jerry, and a sentiment I can only fully agree with. When the professions we are speaking about are so co-dependent upon one another, it's a wonder why some of these roles are (innocently enough, I believe) sometimes overlooked as being less vital or important. Jerry, thank you for your time. I'm sure our readers have appreciated your perspective just as much as I do.

25









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7













Tony Walker

Chief Executive Officer of Ambulance Victoria, Tony Walker, is a Registered Paramedic with over three decades experience working in a range of senior clinical, operational and leadership roles within the ambulance sector. In addition to this, he also holds an adjunct appointment as Associate Professor in the College of Health and Biomedicine at Victoria University and is a Fellow of Paramedics Australasia, a Fellow of the Australian Institute of Managers and Leaders, and a Board Director of the Emergency Services Foundation, the Australasian Council of Ambulance Authorities and the Prostate Cancer Foundation of Australia. Innovation and positive change geared towards the improvement of the overall health and wellbeing of his workforce and the community they all serve is at the heart of his approach, and his success in implanting these various transformations at both a state and a national level, has led to numerous awards and recognitions. We get his views on mental health, managing demands under lack of resources, and why putting the wellbeing of your staff first forms the very foundations of best practice...

Joe Heneghan (J.H): Tony, if you could identify just one of the most common obstacles that you encounter in ensuring your service can effectively deliver EMS to the community in Victoria, what would that obstacle be and where does it originate from?

**Tony Walker (T.W):** One of the most common obstacles we face in delivering our service to the community is the nature of growing demand for our services and providing as equitable service as possible in both rural and regional areas.

J.H: Is there currently any strategy in place to deal with this growing demand?

T.W: We have introduced a revised Clinical Response Model over the past few years which is allowing us to better match demand to the right service based upon clinical need, which is not always going to be an emergency ambulance. This has created capacity to improve availability of our emergency fleet and provide an improved response to the community. We are also increasingly using predictive analytics to help us better understand the nature and patterns of demand and respond accordingly.

J.H: That seems like a logical and smart response. If demand is growing, why send your emergency kit and vehicles to a low-priority or non-emergency

call? A little well-planned and wellorchestrated re-organisation to solve the problem.

And is there anything which you believe should be implemented, such as a piece of legislature, a new body or organisation, or even just a change in culture and attitude, which you feel would improve standards for your service and/or patients?

**T.W:** The issue of the mental health of our staff is at the forefront of our thinking and actions. We need to collectively work together to breakdown the stigma associated with mental health and invest in evidence-based programs that address mental health across the whole lifecycle of our paramedics, volunteers and corporate staff.

J.H: YES! Far aside from longevity and safe standards of practice, merely looking after those you work with and taking good care of your staff. In a job where so much of a person's life is given to the community around them, I also feel that ensuring these programs and systems of support are there for staff is simply an ethical obligation and responsibility, quite aside from any other reason on top of that. Really, good work Tony.



### Focus on Global EMS: Australia

# So, what do you think is the greatest strength of the EMS model in Australia?

T.W: Having large EMS services in each State and Territory with a strong focus on evidence-based practice, systems of care and measurement, and evaluation of our services is definitely a key strength of Australian ambulance services. We are also prepared to challenge ourselves to continuously innovate in order to meet the changing needs of our people and our community.

J.H: And, in keeping with continuous innovation, how would you like to see EMS in Australia improve? What advancements would you like to see made?

**T.W:** We have had a strong focus on diversity and inclusion of recent times but there is still much more to be done to ensure that our workforce truly reflects the community we serve at all levels of the organisation. This requires us to challenge our current ways of thinking in areas such as flexible work, unconscious bias, engagement and education pathways.

J.H: Well that's a very self-aware and honest answer. And, truthfully, self-awareness and honesty with oneself is probably the best way you can tackle issues of that nature in my opinion. It's a common issue we can all point out in different places within our own communities and cultures.

Moving on to the more technical side of things, have you seen any advancements in technology within Australia in the past 5 years or so which you see as particularly beneficial, new, or exciting?

T.W: We have seen some positive impacts with the introduction of 12 lead ECG, mechanical CPR and ultrasounds, but I have to say the area I see as the most exciting are tools such as GoodSAM which allow us to connect the community to a nearby cardiac arrest. This, coupled with a broad roll-out of AEDs in the community as part of an overall cardiac arrest system of care, is a game changer for improving cardiac arrest outcomes in my view.

J.H: Yes, I have to say that it looks like a really good implementation so far as



CFR programs go. And how about if you could create a new bit of technology, no matter how futuristic or seemingly unrealistic, what would you like to see? For what practice would it be used and how would it help staff or patients?

**T.W:** That's an interesting one. For me it's a wearable that is constantly monitoring an individual's health at a physical and mental level and feeding back changes needed to remain healthy, and to seamlessly connect and stream them to the right service when self-care strategies are not working or ineffective, including emergency health care.



J.H: I like that one. If I'm understanding the supposed functions of it correctly then I could probably do with one myself...

Now, regarding the demands placed upon an ambulance service, what, in your opinion, is currently the largest socio-economic burden upon ambulance services in your country?

T.W: I don't like to call it a social burden, however in my view the largest social issue we are facing is the increasing incidence of mental health issues in our community. 1 in 7 of our calls involve some level of mental health issue and we are often providing a mental health response safety net in the community.

J.H: Have you any idea as to the cause, or causes, of this increase you're seeing in calls linked to mental health issues?

**T.W:** Drugs and alcohol are one driver behind the mental issues that we see, however we with all services under pressure we are also playing a safety net role which is also contributing to the numbers.

J.H: And is there anything in place to help manage this then?

**T.W:** The Victorian Government have recently announced a Mental Health Royal Commission which will provide a strong focus on exploring this issue and solutions in detail which is an excellent approach.

J.H: That's very heartening to see something being done on a national political level. Stemming from this then, how are relations between ambulance services in Australia and the general public they serve?







**T.W:** Our paramedics and volunteers are highly respected in the community, however like all ambulance and EMS services Occupational Violence is an issue for us and our staff. A paramedic in Victoria is subject to Occupational Violence every 51 hours and, whilst we have seen injury rates decrease with a number of strategies, it remains a significant risk.

J.H: It's always a tough one to tackle, violence against staff. Especially because it's often so spontaneous. Each country can only try their best to diminish instances of it wherever possible – how are assaults against ambulance field staff treated in your country?

T.W: Last year the Victorian Government introduced changes to legislation that provides for 6 months jail where an emergency worker is assaulted whilst performing their job. Importantly this legislation removes the excuse of drug use or intoxication as an excuse. This is an important change and one which we and police and emergency services and unions collectively pushed heavily for. That said, we need to constantly look at ways we can reduce this risk to our staff through education and awareness, as well as deterrents such as this.

J.H: That's a very good outcome, congratulations. It's excellent when you see a campaign such as this pull through. We have recently had an Act pushed through here in the U.K. too which echoes this in its philosophy. However, I also agree with you – a good, effective deterrent is vital but prevention is obviously the most logical approach wherever possible.

So, whilst we're touching on the political presence behind EMS for a moment, what seems to you to be the biggest political hindrance in delivering the most effective EMS possible to your community?

**T.W:** I am not sure there are any political hindrances to us delivering the most effective EMS services to our community. We have been well supported by the Victorian Government and they have listened to the issues we have raised. They've supported us in a policy and financial sense on our change journey.

J.H: Equally refreshing, if not a little surprising to be honest. I have to confess that, like many others, I've grown to be more than a little mistrustful of government and ministers. Maybe we can borrow some of yours?

Are there any roles currently undertaken by your ambulance staff which you would either like to see expanded upon or, inversely, to perhaps receive help, or partnership, from other parts of the health chain?

T.W: We have worked hard over the past few years to better match the right care to the right patient at the right time through our Revised Clinical response Model. The success of this model is the availability of appropriate clinical pathways that aren't in our direct control. We are working very closely with Primary Health Services to develop and expand these pathways and partnerships and this will continue to be a focus for us into the future.

J.H: So, the Clinical Response Model is already paving better pathways for patients between paramedics and other Allied Health Professionals, as well as alleviating the demand upon EMS as you discussed in your first answer.

Now we've spoken a bit about relations between services and the public, and a bit about relations between services and government. What are relations like between your ambulance services and the trade unions representing your workers?

T.W: In my view we have a very good working relationship with the trade unions representing our staff and have worked hard over the past few years to improve communications and build on this relationship. In areas such as the mental health of our staff and their members we are in lockstep, and whilst we don't always agree on every issue, we have good lines of communication and look for opportunities to find common ground wherever practicable.

J.H: So, given everything that we've spoken about so far, if you could see one change take place within the next 5 years for services in Australia, what would that be?

**T.W:** To digitally connect our paramedics so that they have the requisite patient and system information at their fingertips and can obtain the necessary clinical support and stream patients to the right service at the point of care.

J.H: And finally: what, in your opinion, is the most important thing for innovators of ambulance to keep at the forefront of their mind when implementing change to pre-hospital care?

**T.W:** Never lose sight of your people; they are at the heart of delivering great care, and don't allow yourself to become complacent – the world is constantly changing and ambulance services need to constantly challenge themselves to do better to meet the changing needs of the community.

J.H: Tony, I'd like to thank you for your time, perspectives, and insights. There's certainly a lot to follow up on and learn more about there, and I think it will be a very interesting job in doing so.

### Focus on Global EMS: South Africa





Michael Emmerich

Michael Emmerich has been involved in EMS, Fire & Rescue and its associated fields for 34 years, with 24 years as an ALS Paramedic. He has worked as a remote site medic, flight medic (fixed and rotor), project manager, consulting principal, general manager, HOD, trainer and clinical governance director, for various medical and health related industries and companies. Still actively working in the filed as an instructor and practicing paramedic, with numerous other consulting projects in the background, Mike's time spent as an independent contractor/consultant has introduced him to different EMS systems in over 25 countries in Africa and across 4 continents. Here are his views on EMS provision in South Africa and where it's headed...

Joe Heneghan (J.H): Michael, Africa is a continent which has always had a question mark over it for me. Here in the West, it is often portrayed as just being completely and totally broken, largely following the transatlantic slave trade. On the other hand, you get many people who have visited various African countries who reject this notion and see it as actually highly insulting and patronising. In many countries such as

Mike with a snake in Mozambique

South Africa and Nigeria, for example, there is a rising middle class. Basically, the entire continent does not have the backdrop of a televised charity appeal, which is as the continent is sometimes portrayed through Western media. So, without drawing any assumptions what-so-ever, what would you say are the most pressing issues facing the effective delivery of EMS in South Africa today?

Michael Emmerich (M.E): Safety and security in the workplace, as far too often crews are robbed at gunpoint at accident scenes of their personal belongings or hijacked en route, and equipment is also stolen from the ambulance/response cars whilst on a call as well.

PTSD and depression are also far too often swept under the rug, and the formal support structures that are in place are severely limited and often not used due to concerns over confidentiality and privacy.

J.H: Interesting. That's something quite apart from many other countries we've interviewed in this edition. Sure, they all have at least some experience with violence, but thankfully not to the extent where it's such a large concern as that. PTSD and depression however, seems to be a problem lurking in the dark in almost every country, and definitely needs to be given a bit more light and air. Is there anything currently in place which gives staff support

regarding the violence, theft, and mental health and emotional support?

**M.E:** Certain areas are declared no-go zones, or one can only enter them with a police/security escort. This does not solve the problem though, as it delays response times and then the patients' lives, or health in general, are put at risk due to emergency services not been able to gain access safely.

With respect to PTSD, burnout, depression – not enough is being done in the emergency profession, in my opinion, to correctly identify the early warning signs and then start to deal with the individual via confidential one on one counselling.

J.H: So can you see any room for improvement or change there?

**M.E:** Well I can't see any discernible practical long-term solutions in place, all the systems appear to be reactive as opposed to preventative.

J.H: Yes, and in both cases of violence and PTSD, reactive is nowhere near as good as preventative; the damage has already been done. I would personally describe it as trying to patch up a cracked egg, rather than holding it safely in your hands to begin with. With the lack of sufficient support systems in place, is there anything which you believe should be implemented, such as a piece of legislature, a new body or organisation, or even just a change in culture and attitude?





**M.E:** Yes, I think changes in attitude and culture via aggressive awareness programmes in national media and in local communities needs to be implemented. And confidential independent peer to peer counselling/support programs need to be rolled out too.

J.H: An aggressiveness awareness program could definitely help in employing preventative measures, I should imagine. So, in a country with such immediate dangers acting as obstacles to staff, I'm going to assume that this means medics in South Africa adapt to learn quickly. Necessity is, after all, the best teacher. Considering this, what do you think is the strongest aspect of how South Africa implements pre-hospital emergency care? Is it the model it is based upon, does it lie within training and education etc.?

M.E: Our current education model is changing, but there is much debate from within the industry if the changes are needed, relevant or practical. Whether or not an individual is opposed to the system or is in favour of the new model very much depends upon who you speak to. In years past the training was heavily weighted on inhouse, in-service, practical rotations with experienced senior staff, and the education was driven by doctors. With the move to a nationally standardised degree format, the risk is that qualified practitioners from years past are not being adequately assisted to RPL or grandfather into (parts of) the new system.

So the answer to the question posed is not easy to answer during this transitional phase, as there is no simple yes/no answer, as both the new system which leans towards the CPG model and the older system which focussed on Scope of Practise and Protocols have advantages and disadvantages, notably whilst the RPL phase is being thrashed out and the CPG guidelines are being rolled out via CME workshops.

Personally, I'm in favour of the new model, despite having come through via the older system, but the new model needs to address the concerns of those in this transitional phase, whilst also looking at the strengths of the previous model and incorporating some of them within the new degree CPG system.

J.H: And how would you like to see your service improve? What advancements would you like to see made?

**M.E:** With regard to the educational framework, I'd like to see structured RPL programmes for previous qualifications and realistic credits offered for prior training and grandfathering in of some practitioners at certain levels.

As well as that, an effective peer to peer PTSD counselling program, with an independent hotline to call, which could be even manned by practitioners currently in service who are concerned, caring and passionate about dealing correctly with PTSD and depression within the industry.

And finally, I'd like to see us using senior experienced practitioners as mentors in the educational framework and in service. Far too often we are discarding them or ignoring their years of experience in guiding and mentoring younger medics.

J.H: Have there been any advancements in technology within the past 5 years which you see as particularly beneficial, new, or exciting?

**M.E:** I've seen some development in haemorrhage control and the move towards aggressively managing life threatening bleeding. Also POCUS,

the new stethoscope. And then I would also recommend looking at the continual shift and discussion around airway management – both at a BLS and ALS level– if you're looking to see some interesting technological developments.

J.H: How about if you could create a new bit of technology— what would you like to see? What would you use it for and how?

M.E: Medical history chip implants that are updated by by wifi and can be read by biometric scanners that emergency services would carry (brilliant when your patient cannot speak, and you need a critical SAMPLE History. Yes, I know it poses all sorts of medico legal and ethical thorns, not to mention certain sectors of the population who would be up in arms re privacy, religious or political reasons.

J.H: HA- that's like the type of idea George Orwell and Philip K. Dick would come up with after a night drinking together. You're quite right; in the wrong hands access to information like that could carry quite sinister connotations. But, in the hands of trustworthy people whose only interest is to care and treat, it actually sounds like a God-send.

So what, in your opinion, is currently the largest socio-economic burden upon ambulance services in South Africa? Obviously, we've already touched on these with the mention of crime in

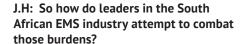


Mike treating a patient

### Focus on Global EMS: South Africa

general. But these, and other issues you may face, can come from many places. For example, typically we hear in other countries around the world about alcohol and drug abuse, nuisance calls, lack of funding, inadequate kit or vehicles perhaps, or too few new recruits etc.?

M.E: Ah yes, so many of those examples you cite above are burdens on our industry. Nuisance calls, funding, equipment (broken or lack thereof), vehicle breakdowns, and too few senior qualified experienced persons within the services to mentor the new recruits. Delayed or prolonged response times are also an issue we face right now.



**M.E:** At present we are not winning the war in dealing with some of these issues. There are a few centres of excellence (when compared to the areas of dysfunction), but when bench marked against international best practise standards, they are still not adequate.

How do we win the war? Well, 'one battle at a time and very slowly trench by trench we can make an impact', says the idealist, but in reality, it is way more difficult. We need to overcome the lethargy at a political level to make an impact.

J.H: And, especially given your first answer earlier in the interview,



Storms in the Southern DRC

what are the relations like between ambulance staff and the general public they serve in South Africa? Are ambulance staff respected in areas of your country?

**M.E:** Within certain communities ambulance crews are at risk, with respect to life, possessions and medical equipment/vehicles.

J.H: Okay. So this problem is not in every area then, but in the areas where it does exist, it's a very immediate and important threat. I suppose in this case it just comes back to what you said earlier about more focus being placed upon prevention and educating others in aggression and recognising signifiers.

Moving on, are there any roles currently undertaken by your ambulance staff

which you would either like to see expanded upon, or to perhaps have help from other parts of the health chain?

M.E: Being able to discharge a patient on scene would be useful, as that would negate a lot of the nuisance calls, but then when working in an area with poor primary healthcare that might not always be an option. So also more primary healthcare centres in remote areas of the country.

J.H: And what are relations like between your ambulance services and the trade unions representing the workers?

M.E: Well, within the private ambulance sector there are no trade unions and they're discouraged from being a strong body of influence. Within the Government and Provincial sector members may belong to a union and they do work towards assisting members in certain areas. There's always the debate with the service regarding strike action, with respect to it being an essential service.

J.H: Yes, strike action can always be a tough and tense one in many countries where essential and emergency services are concerned. We've spoken about a lot, but one thing I haven't really touched on is the actual ambulances themselves. Is there anything you believe should be introduced as standard to the vehicles in your country?



Fixed wing take off in DRC





**M.E:** Well, specific to South Africa as you say (our continent is a vast and diverse one, and the needs at one end are different to the needs at another), I would like to see legislation tabled to make the following mandatory on all ambulances, private and govt:

- Basic Self-loading stretchers to be made mandatory on all ambulances (as in the Ferno model 19 or 21 style stretcher) to reduce back injuries to EMS providers.
- Piped oxygen with Heyer quick release fittings as standard for safety and ease of use.
- More rigorous inspecting of all ambulances to ensure full compliance re minimum equipment per scope of vehicle and for road worthiness.
- Safe and secure seating for the medic treating the patient, with decent 3-point restraint system.

- Stronger focus on safety as to how and where equipment (bags, monitors etc..) are stored, clamped or secured.
- More thought to be given in the design of 4x4 ambulances, re the above points.

J.H: And finally, if you could see one change take place within the next 5 years for your service, what would that he?

M.E: Well in the valley where I live in South Africa, we have no ambulance service— not even a volunteer based first responder system! So, what I would love to see is some sort of service in my little valley, even if only a first responder service in a community motor vehicle, which doesn't even have to be an ambulance. We just need to get a responder to the scene quicker than the closest service can get to the patient.

J.H: That... does not seem like too much to ask for. Yeah. Yeah, we'll let you have that as an answer. Just 'an ambulance' to come and pick you up in case of a life-threatening emergency. Or even just a local responder in a jeep. Fair shout. Mike.

Further than that, I can only say thank you for your time and your insights. I will personally be very interested in learning more about EMS models in Africa and seeing how it further develops in South Africa.

If you have any questions for Mike regarding any projects and innovations, or any of the things discussed in this interview and any crossovers they may have in your own country, then he can be contacted on: mikesnexus@gmail.com





# Ambulance Emergency Response Driver Training

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Eli Jaffe

Eli Jaffe, MDA, PhD, EMT-P, is the Director of Training, PR, Volunteer Activities, Marketing and International Relations Division, of the Israeli national EMS organization Magen David Adom (MDA). One of the leading researchers in Israel in the field of volunteers and the prevention of PTSD, Dr. Jaffe is a well-known lecturer in the Israeli universities and has published various books and articles around EMS. He gives us a brief overview of EMS in Israel: the issues it faces, and the strengths that it plays to...

Joe Heneghan (J.H): Eli, from the perspective of someone who's never visited Israel, one can only assume that there must be a variety of different obstacles medics can face when attending calls and, in a wider context, in managing those obstacles across an ambulance service.

If you could identify just one of the most common obstacles that you encounter in ensuring Magen David Adom (MDA) can effectively deliver EMS to communities in Israel, what would that obstacle be and where does it come from?

**Eli Jaffe (E.J):** Our largest obstacle is the fact that we are a non-governmental organisation. If we would receive government funding It would be a lot easier to reduce response times whilst being professional, innovative and adaptive.

# J.H: Is there currently any strategy in place to deal with the lack of funding then?

**E.J:** Well, volunteers help us get around this massively. Magen David Adom has 2,400 employees and 22,000 volunteers and volunteers fill almost every role in the organisation. From youth volunteers, EMTs, Paramedics, Dispatchers, Instructors, Blood bank etc. and volunteer First Responders help respond to every emergency too. A designated app helps dispatch First Responders to emergencies based on GPS location. Following from that, I think being able to see live ambulance



Uriel Goldberg and Debi Carmon, MDA

locations and to move stations and ambulances around also helps. That we are recognised as Israel's one national organisation also helps in this.

J.H: And is there anything which you believe should be implemented which you feel would improve standards for MDA and the its patients?

**E.J:** Yes, telemedicine - EMT from a distance.

J.H: So how would you like to see your service improve then? What

# advancements would you like to see made?

**E.J:** I would like to have the ability to leave as many patients as possible at home and treat them in the community. I think that this would be much better for many patients who do not necessarily need transport to hospital and who would probably end up only feeling a bit sicker from the ride. It would make a huge difference to their overall experience and wellbeing. Also, response times—we have major challenges with additional cars on road.



Out traffic really is something else in Israel.

And, finally, to bring patients straight to wards and not to ER. That would be much more efficient, cost-effective, and better overall for the patient.

J.H: And speaking of improvements, how about technology? Have you seen any advancements in technology within the past 5 years which you see as particularly beneficial, new, or exciting?

**E.J:** The ability to use all of the technology from a smartphone is one advancement I really like. Being able to see patients from the scene, via the caller, ambulance team etc and to then be able to use this information to update the hospital is definitely another. And I could also say, so far as technological advancement is concerned, pretty much all of the technology developed by Magen David Adom in-house.

Automatic ambulance dispatch, locating first responders, electronic paperwork, ECG being sent straight to cardiologist, stroke results to the neurologist, cars which call for ambulances after accidents. I personally find this all fantastic, it's great.

J.H: So, to add to this... if you could create a new bit of technology, anything at all with no restrictions, what would



MDA RTI

you like to see? For what practice would it be used and how would it help staff or patients?

**E.J:** When someone calls to report a car accident, they usually drive past. Our dream is to have a way to be able to know who is in the car and the extent of the injuries. If there was something that could perform this reliably, that would obviously be a huge help in informing us what we can expect prior to arrival upon scene.

J.H: Yes, you only have to slightly imagine a scenario where that happens to see just how much confusion could be introduced before you've even arrived. I suppose it's not actually that unrealistic, as you already have technology that sends information about RTI's back to your control room anyway. It's not such a far step away.

So moving on, what, in your opinion, is currently the largest socio-economic burden upon MDA when trying to deliver effective EMS in Israel?

**E.J:** When there is a terror attack in Israel, the emergency services receive many prank and nuisance calls in order to try to disrupt services. And of course, in certain areas stones are often thrown at ambulances. So sometimes the burden is in the nature of a terror attack, and sometimes it is just criminal. Either way, they both cause us a lot of trouble in helping people.

J.H: How do you manage to counteract this? Obviously, this isn't the same as kids chucking rocks at ambulances and fire engines in the U.K, it is much more deep-rooted and stems from much deeper political problems. How do you attempt to get around that? Or is it just something you shoulder?



Photo Credit: Assaf Brezinger - American Friends of Magen David Adom

### Focus on Global EMS: Israel





MDA crew and vehicle

- **E.J:** Simply that certain areas require a police escort in order to enter.
- J.H: So, what are the relations like between medics and the general public you serve then? Are ambulance staff respected in your country, or is the threat of assault against staff more common than not?
- **E.J:** No. Other than what I mentioned above, I find that medics are generally respected. Most people can see that someone needs help, and that you're helping them.
- J.H: Recently in the UK we have passed the Assaults on Emergency Worker (Offences) Act 2018. It basically sees that assaults against emergency workers are essentially seen as the same as an attack upon the State. Essentially, if you're guilty of assault against an emergency worker, then you can bet that a good example is going to be made of you to in order deter others. But now, by law, that will be consistent with every prosecution. How are assaults against ambulance field staff treated in Israel?
- **E.J:** No, we don't have anything like that here yet. We'd be happy to learn the law and implement it here though!

- J.H: So, moving on from the socioeconomic obstacles that you sometimes face, what seems to you to be the biggest political hindrance in delivering the most effective EMS possible to your community?
- **E.J:** Simply as I said earlier; that we're and NGO, so we're lacking funding for emergencies, for training etc.
- J.H: Are there any roles currently undertaken by your ambulance staff which you would either like to see expanded upon or, inversely, to perhaps

receive help, or partnership, from other parts of the health chain?

- **E.J:** Yes, I'd like some sort of support system for the homeless. We often get calls when there is really no need for medical treatment or evacuation, and this is also a fairly notable issue for us to try and navigate.
- J.H: If applicable, what are relations like between your ambulance services and the trade unions representing your workers?
- E.J: Excellent.
- J.H: What, in your opinion, is the most important thing for innovators of ambulance to keep at the forefront of their mind when implementing change to pre-hospital care?
- **E.J:** The patient.
- J.H: To be honest, that answer doesn't even need any elaboration. Well put. Finally, Eli, if you could see just one change take place within the next 5 years for your service, what would that be?
- **E.J:** Can you guess what I'm going to say?... Government funding!!!
- J.H: Eli, thank you for your insights on EMS as provided in Israel by MDA. I'll be especially interested in keeping an eye in any technology coming out of Israel!







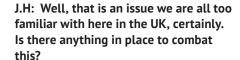


Kenneth Kronohage

Kenneth Kronohage is a Swedish national and a Global Strategic Consultant & Leader in Healthcare & Emergency Medical Services. He has his training in firefighting, nursing (anaesthesia specialist) and as a paramedic. With a particular eye for management, innovation, quality control, and bringing people together, he has a variety of expertise and specialised interests that have made him a well-known figure in international EMS circles. We ask for his opinions on what Sweden is excelling at, and how we can approach the multi-faceted issues that we are all too familiar with ourselves, regardless of borders and differing EMS systems. Here's what he had to say...

Joe Heneghan (J.H): Kenneth, if you could identify just one of the most common obstacles that you encounter in ensuring services in Sweden can effectively deliver EMS to their surrounding communities, what would that obstacle be and where does it come from?

Kenneth Kronohage (K.K): I think the biggest obstacle we face would be the lack and misuse of ambulance resources. It comes from the public's perception of having the right to call for an ambulance regardless, if they need a taxi or just a NEPTS journey.



**K.K:** One strategy is to let nurses do the call triage. They have much more authorisation to tell patients that they will not get an ambulance. However, this has also created issues where patients who actually need an ambulance have been refused.

# J.H: Yes, that's a tricky one. Is there anything then which you believe should be implemented which you feel would improve this?

**K.K:** Well, information and liaison with the public from the ambulance services requires additional resources and when there is a general lack of resources, there's no time for prevention. Somehow a catch 22 situation.



Ambulance station in Sweden

J.H: Yes, a circular problem. You can't inform the public with a lack of resource, and the resources are used up when the public call for ambulances they don't need. What do you think is the strongest aspect of how Sweden implements pre-hospital emergency care then?

**K.K:** Sweden has a system based upon specifically trained nurses in ambulances. There are pros and cons for such a system though. In conclusion, non-emergency patients have more advantages of seeing ambulance nurses than the real emergency patient. The latter ones would benefit much more in seeing a Critical Care Paramedic.

J.H: So how would you like to see your service improve in that case? What

### advancements would you like to see made?

**K.K:** Video transmission to specialist doctors for advice would be favourable. Lab-kit for out of hospital use would be a blessing. Ultrasound and lightweight monitors would also be very good and maybe one day we will see a portable CAT scan to do stroke examination.

J.H: So, speaking of this, what about advancements in technology? Have there been any within the past 5 years which you see as particularly beneficial or exciting?

**K.K:** Many, but it normally takes decades before they are implemented in in the wider ambulance service. Trying out technology in a few units is certainly not a major advancement.

### Focus on Global EMS: Sweden



Swedish ambulance on call

It's when you see the technology in all units that the real achievement has been done.

J.H: So the tech is there, but it isn't really widely available for use yet. How about if you could just create a new bit of technology, absolutely anything at all, what would you like to see?

**K.K:** Well, I think that ERC's must develop their technology so they can take advantages of all the smartphones among the public. For instance, it's still not possible to make a videocall to an ambulance service in Sweden and this happens in the year of 2019! AML (Advanced Mobile Location) can save very valuable time, but it requires a call via an app where the user accepts to be traced. In the real futuristic scenario, I would love to see flying motorcycles or flying cars carrying paramedics to the most criticall patents.

J.H: Ha! I wouldn't like to see a patient fall out the back of one though! What you say is true though. Almost every one of us carries one of those little devices in our pockets; it's almost a tag for every person in society. We focus on the Orwellian possibilities of this, but there are many ways in which it can actually be used for good in a safe, protected manner which benefits us all.

Moving on, what, in your opinion, is currently the largest socio-economic burden upon ambulance services in your country?

**K.K:** There has been an increase of elderly people which has actually put unexpected burdens on the welfare society. This in combination with massive immigration has created challenging demands on the service.

### J.H: And what are the relations like between ambulance services and the general public in Sweden?

K.K: Well, in Sweden we have had a very interesting and effective program called the Människan Bakom Uniformen (Men Behind Uniform- PBU) which deals with relations between fire, police, and ambulance and our youth - particularly migrant teenagers who are, for many various reasons, understandably often related to these cases. What people have to understand is that Sweden has had, for many years, a very low population of migrants. The influx we have seen in the last decade or so is truly a huge and sudden spike. This then introduces a socio-economic problem – namely that these migrants all have to fit somewhere. They are often put in the same neighbourhoods, and the sheer numbers create communities battling against lower household incomes, less work, and generally the types of social problems which stem from these factors which you see in almost any country. Work is outmatched by the number of people looking for it, and youths turn to life with each other on the street.

In these cultures, acts against what is seen as part of the establishment are

applauded. They do not see vehicles filled with professionals there to help them when needed. They see a marked vehicle which represents the State and they throw a rock at it, or maybe try to intimidate the staff. These incidents are not alarmingly high, but this program was born following an incident where a large rock was dropped onto a fire engine causing a horribly bad accident. It brings young members of the local community together in a series of seminars so that they can get to know the people behind the uniform. They speak on a personal level about just anything, and from there they eventually get to listen to professionals describe their work and why it means so much to them. They are taught skills and, when all of this is put together, friendships are made. They stop seeing marked vehicles, and they see good people instead, out working in their community. And this does not just stay in the classroom either, it spreads out into the community from there. The participants take this home. When they see it happening, they will sometimes stick up for their new uniformed friends, and may even explain why. Word, and trust, spreads in the community in this way.

J.H: Yes, you have mentioned this to me before, and in fact you pointed me to a very interesting article on this published in JEMS. I would strongly urge others to read it too, it's a great piece and a good opportunity for some to see how they might implement a similar strategy in their own country, should they want to. For anyone reading, I know this can be found on their site and was published somewhere around mid-February of this year.

So, moving away from the social side of things, and onto their political counterparts, what seems to you to be the biggest political hindrance in delivering the most effective EMS possible to communities in Sweden?

**K.K:** The ideological barriers against private service initiatives in the ambulance emergency services is indeed hindering the delivery of the most efficient EMS possible.

J.H: What are your thoughts on this? How would you like to see it rectified?





**K.K:** Highly complexed business with high demands on safety must be regulated and followed up in detail. Look at the airline industry. Very few would have had the opportunity to fly if only public organisations would be operating aircrafts. Most of the world's airline service started in public operation, but today we have realised that the private industry does this much better and cheaper. Having said that, without firm regulation and harsh consequences for breach of regulation, companies like Ryanair would have been a safety issue. Now they are only an issue for their passenger's comfort and despite that 130 million passengers use them every year. Passengers that normally not would have afforded to fly if only the states have provided the service. Unfortunately, todays regulation of healthcare is weak and not fair since it treats public and private provision differently, and this is not only in Sweden. You see this in many countries.

J.H: Are there any roles currently undertaken by your ambulance staff which you would either like to see expanded upon or, inversely, to perhaps receive help, or partnership, from other parts of the health chain?

**K.K:** More dedicated Mental Health Ambulances would be very favourable.

J.H: Yes, I'm happy to say that focus upon mental health both in the community and within services themselves seems to be on the rise at an international level.

And, to round It all off, what are relations like between your ambulance services and the trade unions representing your workers?

**K.K:** There are very good relationships between ambulance service and trade unions in Sweden. I'm happy to say there really isn't much too comment upon about how this can be improved, in my own opinion.

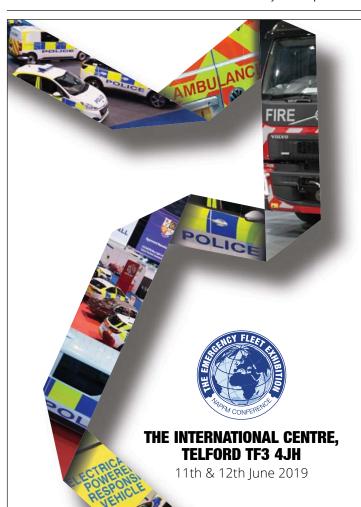
J.H: So, where innovation is needed, what would you say is the most important thing to keep in mind when implementing change?

**K.K:** Communication with staff is pivotal. Knowledge transfer should always go two ways.

J.H: Like music to my ears, Kenneth. Finally, if you could see just one change take place within the next 5 years for your service, what would that be?

**K.K:** Sweden aims to have two nurses in each ambulance and most likely this phenomenon will be fulfilled in coming 5 years. Whether or not it turns out to be a good or bad move, I will let others decide.

J.H: Kenneth, thank you for taking the time to share your perspective on EMS in Sweden with me. There are definitely some things there which I know should be of interest to services and leaders in some other countries! Personally, I'll look forward to seeing what comes.



## The Emergency Fleet Exhibition focuses on transport and related fleet products for the Ambulance, Fire & Rescue and Police sectors.

The 2019 exhibition will showcase a comprehensive range of vehicles, equipment and services for the benefit of this specialised area of the public sector, and attracts a focused high-level audience from the other emergency services, local authorities and some Government departments.

Over 100 key suppliers will be showing vehicles, equipment and technology used by the **Ambulance**, **Fire and Police sectors** and **rescue organisations**. These exhibitors will include major vehicle manufacturers of emergency vehicles who will be displaying current and future vehicle technologies, making it the essential event for everyone involved with emergency fleet.

The main conference will feature Police and Fire fleet specific topics. In addition there will be theatres within the main exhibition area, featuring seminars specific to the emergency fleet industry.

### REGISTRATION

To attend the Emergency Fleet Exhibition as a visitor, or to attend the joint NAPFM & NFCC Conference or NSAFG Meeting as a delegate, please visit **www.napfmevent.org.uk** 

Fire & Rescue Fleet xhibition and Conference 46 NAPFM CONFERENCE
National Association of Police Fleet Managers Conference

The National Strategic Ambulance Fleet Group Meeting

### Focus on Global EMS: Thailand





Chris Hall

Currently working as an Ambulance Station Team Leader for St. John Ambulance in London, Chris Hall has led a very hands-on career in his time spent there and also at the British Red Cross. Starting at the Red Cross in New Zealand as a Youth Member in 1974, he moved to the UK in 1988 where he continued at their London branch as a volunteer. In 1990 he became an IHCD qualified ambulance crew member and, following a few other positions, he went on to become a volunteer Team Leader & was part of the emergency planning team in London. In 2013, he joined St John as a volunteer and in 2014, started working for SJA, working his way up to the position he currently holds now. However, aside from his experiences and the in-depth knowledge and understanding he gained of EMS during these years, it his stints in Thailand that led me to approach him. In 2009 he started volunteering with several community based ambulance services in Thailand, 6 years later he co-founded a new Foundation (Thai equivalent to an NGO), Kham Nakorn EMS & Rescue, in Khoen Kaen. Kham Nakorn EMS & Rescue focuses on uniting ambulance services in the region through education and cooperation, so that they can fulfil their potential for the best delivery possible for EMS possible in their area. In addition to this, they have also received government awards for their work aimed at decreasing the alarmingly high national mortality rates due to drowning through their community programs in teaching water safety and swimming. That's why I came to him for the best possible look at EMS in one of South East Asia's busiest, most prominent, and mostpopularly visited countries...

Joseph Heneghan (J.H): Chris, Thailand is a country rich in both history and culture, and I will not pretend to be any expert on it. What I am aware of is that, alongside it's mountainous scenery, idyllic seas and rich philosophical religious history, it is also well known for its notably unequal distribution of wealth. In a land so full of socioeconomic contrasts, what would you

say are the most pressing issues facing ambulance staff in Thailand today?

Chris Hall (C.H): There are a number of issues which one could summarise in about five broad but well-known categories: training, government funding and support, finance, organisation, and improved cooperation between services.

J.H: Is there anything currently in place nationally which addresses these issues?

**C.H:** We are locally working on collaborative working and also the development of new training programs, which addresses some, but obviously not all, of the issues I just mentioned we're currently facing.

J.H: So, with regards to those new training programs, how effective would you say they are so far in addressing the problems brought about by a lack of training?

**C.H:** Once we establish a wider collaborative network (which is in progress and has had some marked success) and the new training receives full authorisation for delivery, we will see the start of conjoined regional EMS provision with skills and abilities starting to bring some of the training from the West, which is adapted to firstly meet local needs and, secondly, is adapted to the individual learning of volunteers – this will in turn lead to



Photo courtesy of: Kham Nakorn EMS & Rescue

improved clinical outcomes, increased professionalism... all of which will lead to a better service to the community.

J.H: Step by step, and piece by piece, you move forward and bring each region together to make everybody stronger, better informed, and to improve training in the process. A very straightforward and logical plan. Is there anything you would add, and extra support system you would like to see introduced, which would aid this process?

**C.H:** 80% of ambulance staff are volunteers and there is a need for creating a professional volunteer led service which, whilst being led by individual organisations, has an integrated approach to training, equipment and perhaps pooled funding, resources and equipment. Volunteers are keen to learn and develop their skills so they can provide an improvised level of care.

J.H: Yes, I get you. Keeping some independence but merely sharing and collaborating in order to stay stronger together. And what would you say is the greatest strength in how Thailand implements pre-hospital emergency care?

C.H: It lies in the desire of the volunteers to deliver 'merit' which is something rooted deeply in the Buddhist belief (doing good for someone with no want of reward). There are a huge number of volunteers across the country who desire and want to be able to deliver better, professional care with the skills and support to be able to do so.

J.H: Yes, that is another stereotype about some Eastern Asian countries such as Thailand that I'd heard before—that it's people, especially amongst the working classes where poverty levels are high, gain a lot from each other through particularly benevolent Buddhist philosophies which have been deeply ingrained as a way of life over thousands of years. Giving without wanting anything back, as you say, as this the personal development and the act of love which comes from performing the act is considered the reward in itself. This is indeed a very

heart-warming philosophy at the root of EMS which you've pointed out.

How would you like to see your service improve? What advancements would you like to see made?

C.H: Well, this is what we are working on now; new training proposals to bring a new level of care to the community. In an ideal world, we would have a country-wide fleet of ambulances and first responder vehicles that were fit for purpose, but I cannot see this happening without a cash injection from the Government or from another organisation. We are working on an integrated thinking project in Khon Kaen where we will work with other volunteer organisations, sharing resources and training. We already have reached outside of our area and are forming links with other volunteer led services across the country too.

J.H: Excellent! And whilst we're talking about advancements in EMS, how about technology? What's it like over in Thailand- have you seen much by way of advancements in tech within the past 5 years?



Photo courtesy of: Kham Nakorn EMS & Rescue

**C.H:** One of the key advances we would like to see in an affordable safety compliant ambulance.

J.H: So, the potential is there but once again it is a question of funding. If money wasn't an issue, and you could create a new bit of technology, what would you like to see? For what practice would it be used and how would it help staff or patients?

**C.H:** I think that at this stage, we need to focus on the basics needed TODAY rather than some blue sky thinking. However, I would like to see

an affordable, adaptable vehicle that meets safety standards and is available at a realistically affordable cost to volunteer organisations.

J.H: Yes, I had anticipated such a response, and I can't blame you for thinking practically. Necessity over luxury. What, in your opinion then, is currently the largest socio-economic burden upon services in Thailand?

**C.H:** Inadequate kit. Lack of compliant vehicles. Training and retention. Sufficiently addressing these three areas first and foremost, as we currently are doing, will see a massive advancement.

J.H: And aside from the work you are currently undertaking, how does Thailand attempt to combat those burdens?

**C.H:** We would like to work with the various government agencies, state and private hospitals in seeing how, in partnership, we can work towards effecting positive changes.

J.H: What, in your opinion, is the most important thing for innovators of ambulance to keep at the forefront of their mind when implementing change to pre-hospital care?

**C.H:** Well, here in Thailand, we're dealing with a lack of urgent necessities, so for me it is one simple thing, and one simple thing only; affordability!

J.H: And finally, Chris, if you could see one change take place within the next 5 years for your service, what would that be?

**C.H:** Well, the recurring theme through this conversation, and my three biggest focuses: a new training program which is backed up with good vehicles and appropriate equipment!

J.H: Chris, thank you for your time and your insights on such a fascinating developing EMS system. I look very forward to following more of the fine work Kham Nakorn EMS & Rescue is undertaking to improve the training and education in prehospital emergency care in Thaliand, and in seeing how it all develops further from there! It all look very promising indeed.

# From the Africa Desk of Ambulance Today: Case Presentation – Electrical Alternans in the field

By Michael Emmerich

For this Africa quarterly, I will be discussing a cardiac patient encountered on a remote site in Africa and the unique challenges faced by the paramedic and his support team.



### **Patient Presentation:**

A patient presents at a remote site in the Southern DRC around 07:15 on a Saturday morning, with the patient's chief complaint being shortness of breath (SOB) and swollen legs. The patient is brought into the emergency room and the consultation process commences. On first examination the findings are as follows:

### OBSERVATIONS / VITAL SIGNS on Initial Assessment

Heart Rate 108 - Regular Blood Pressure 158/91 Temperature 36.8 Pupils PEARL

Oxygen Saturation 75% on a FiO2 of room air

Respiratory Rate 32 bpm

Respiratory Effort Rapid and laboured Skin colour & appearance Flushed and warm Blood Sugar 7.1 mmol/li

Malaria Rapid Diagnostic Test TDR -

### **PHYSICAL EXAMINATION**

Head & Neck NAD

Chest Cardiac Auscultation detects Miåtral

Regurgitation – Lungs clear

Abdomen Distend, Pitted Oedema on all Quads

- No Ascites

Pelvis NAD

Upper Limbs Oedema in fingers and wrists – no pitting

Lower Limbs Pitted Oedema up to the knees

Back NAD

ECG – 12 lead **Electrical alternans and Atrial hypertrophy**Other **Pulsus Paradoxus** noted in both radial pulses

PRELIMINARY DIAGNOSIS

Date/Time Acute Pericardial Effusion

Date/Time Differential Diagnosis of Mitral Regurgitation

Initial 12 Lead ECG done at mine clinic



The ECG findings of electrical alternans are usually associated with pericardial effusion (with the potential to lead to pericardial tamponade) and is due to the periodic wobbling of the heart in the pericardium. The significance of the pulsus paradoxus adds strength to this initial diagnosis. Without access to an ultrasound or X-ray, a definitive diagnosis could not be made and based upon the entire patient presentation,

including excessive weight, short neck and history of two malaria positive tests over the past 7 months, a decision is made to evacuate the patient off-site to a cardiac ICU unit in Johannesburg, South Africa. In further consultation with the top cover support Dr; palliative care, maintaining oxygen saturation by means of supplemental oxygen (done via nasal prongs at 3 to 4li/min to maintain Sat's of 90 to 93%) and the insertion of a TKVO IV line is agreed upon.

If this patient was in an urban setting or even a rural setting with rapid access to a Cardiac ICU, a definitive diagnosis and ACLS treatment could be initiated forthwith in a controlled multi-team clinical setting.

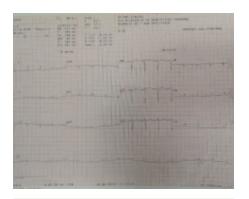
### The challenges faced by the team:

Plans are put in place to begin evacuating the patient, the nearest landing strip only has daylight landing rating, so the patient would need to be there before 16:00 to facilitate the fixed wing evacuation. Before this can happen, multiple processes need to be initiated: approval gained from the insurers, an evacuation company needs to be appointed to do the flight, landing clearances must be granted by the DRC aviation authorities and the patient needs to be taken there by road - a 2-hour road trip in a 4X4 ambulance on a muddy, wet and potholed gravel road. In this instance, for a variety of reasons, landing clearances are taking longer than usual so a decision is made to charter a light aircraft – the Cessna Caravan (non-pressurised) - and to move the patient from the landing strip to the nearest largest town with night landing capability (so clearances can be obtained for that evening and because it has a good hospital nearby where the paramedic can keep the patient stable).

It must be noted that once the paramedic leaves the work site, he is working alone with the patient, with only the equipment he chooses to take for the road transfer, the chartered flight and the hospital stay. They eventually arrive at the neighbouring large city in the DRC and move the patient from the airport to the

nominated holding hospital, where the paramedic settles the patient in – managing, monitoring, and continuing to co-ordinate the evacuation with various flight and insurance desks. Due to ongoing political instability in the region, the airport with night landing capability is shut down for the evening and the paramedic must sit it out until sunrise with his patient.

At sunrise the whole process starts all over again, to get clearances and wait for the fixed wing ICU jet from South Africa.



12 Lead ECG done the following day at local hospital

### The patient on (ongoing) re-examination

Throughout the night the paramedic kept watch, monitoring and keeping the patient attached to the various monitors he dragged with him from the work site. Upon early morning re-examination a few new flags have popped up: abdominal cellulitis, a raised fever (37.8 C) and a positive malaria test result. They are also able to do a chest X-ray and notice a widened mediastinum and the presence of early pulmonary oedema developing in the base of the lungs. A third 12 lead ECG is done to see if there is developing ischemia or signs of an infarct - none are present. The fever is managed with IV parfalgan (paracetamol) while oral antibiotics and coartem are started for the infection and malaria. The paramedic discusses the ongoing care with his top cover Dr life line, and a Dr in the hospital. The diagnosis does now appear to be definitive - that of pericardial effusion.

### The flight evacuation

Finally landing clearances are obtained (which is another story in itself) and a landing ETA is finalised, for around 17:00 on the Sunday afternoon. The patient is loaded into an ambulance with the paramedic and all his medical gear and is moved to the airport. As the plane is on final approach, the heavens open and it starts raining. After a detailed, comprehensive and wet handover, the patient is loaded onto the jet and they depart for the awaiting Cardiac ICU team in Johannesburg, South Africa.

### Case close out

34 hours have now elapsed since the patient was initially seen by the paramedic back at the work site. Throughout this time the medic has been by his patient's side, giving comfort, reassurance and medical care as needed. Finally, sleep is possible but getting out of the wet and dirty work clothes, followed by a hot shower and a decent meal, must happen.

The patient arrived in Johannesburg and was admitted into care at around 23:00 on the Sunday evening – almost 40 hours since the original provisional diagnosis was made. Treating and moving the sick and injured in Africa presents one with unique challenges not normally encountered in the developed world, or discussed at most cardiac symposiums. Welcome to the life of the remote and austere paramedic in Africa.

Tell Michael what you think about this article by emailing him at: mikesnexus@gmail.com

If you have any ideas for special feature articles on ambulance care in any part of Africa, we would like to speak with you about them.

Equally, if you have any news items you would like us to run either in our magazine or on our daily-updated global ambulance news website please email us at:
editor@ambulancetoday.co.uk



# Addressing compassion fatigue in the ambulance service control room



By Claire Hunter

It's well known that working within healthcare, whilst often intensely rewarding, can be incredibly stressful. Programmes like '999 What's Your Emergency?' have highlighted the demands that ambulance crews face, but less well recognised are the challenges faced by emergency call takers. These staff have to be ready to deal with whatever comes their way. They're expected to handle calls quickly, but with competence, compassion and respect.

So, it's not surprising that research by mental health charity MIND found that call takers sometimes felt overwhelmed which can impact on their own wellbeing. MIND's research found that call handlers often felt ill-prepared in dealing with callers experiencing

### Biography: Claire Hunter



Claire Hunter is the founder of Red Lotus Consulting, a company dedicated to helping people create happier, healthier and more productive lives at work and at home. Alongside her

wellbeing coaching and consulting, founder Claire Hunter also heads up a national Learning and Development team within the NHS. Having worked within the NHS for over 20 years, she particularly understands the complexity, pressures and competing demands of working within the public sector.

She believes passionately in the power of compassion, authentic connection and vulnerability in all areas of life, and is convinced that these are central to developing a happy, healthy, loyal and productive workforce.

Claire is a Mental Health First Aid Instructor for MHFA England and mindfulness teacher. She is tireless in her energy and enthusiasm to inspire, develop and mentor others; using both a strong academic background and real-life experience to facilitate personal growth. Another area of expertise for Claire is leadership development. She has designed and delivered several leadership development programmes for the NHS and she believes passionately that good leaders aren't born, but made.

mental health problems, describing this as one of the biggest challenges of the role. Call handlers sometimes have to stay on the line with callers experiencing suicidal thoughts for long periods of time, while waiting for frontline response to arrive, and the research found that staff worried about making things worse by saying the wrong thing.



### How one ambulance service is responding

It's heartening, therefore, to see how one ambulance service is taking the issue of staff and patient mental health seriously. South Central Ambulance Service (SCAS) has commissioned a series of training programmes which have included Mental Health First Aid (MHFA), Mental Health Champions in Telephone Triage, Compassion@Work Training. They chose a training provider that specialises in working with public sector organisations, Red Lotus Consulting. Founder of the company, Claire Hunter, has this to say on the subject of looking after staff:

"If we want our workforce to care – about the work they do, about the people they serve and about their colleagues – then we must care for them. Genuinely care for



them, in a way that is tangible and that permeates the bones of the organisation. We need to care about people in their best and worst moments, when they excel and when they make a mistake, when they're nice to be around and when they're at their grumpiest and their worst. This is how we build a genuinely compassionate workforce that's loyal, committed and that will go the extra mile when needed. A commitment to wellbeing doesn't have to cost the earth, but it does have to be led by a senior team who are passionate and committed. It's so easy to adopt a tick box approach, by training a few mental health first aiders here and there, but this is seldom enough. It needs to become part of the fabric of the organisation and this is where SCAS is excelling."

# A comprehensive programme focusing on mental health and wellbeing

As well as equipping staff with the skills needed to support each other through MHFA, SCAS has also focused on delivering a better service to patients by putting staff through Mental Health Champions in Telephone Triage training. The focus of this programme is to equip staff with the tools to be able to respond to those with mental health issues in a skilled, compassionate and non-judgemental way.

### **Focus on Red Lotus Consulting**

### Compassion in the workplace

SCAS has also rolled out an innovative Compassion@Work Course which focuses on managing teams with compassion and high levels of emotional intelligence, in order to start creating the conditions for a highly engaged and loyal workforce. The next stage is for SCAS to implement Compassion@Work Circles. This involves groups of staff coming together to reflect in a structured and consistent way, by challenging client interactions. The aim is to offer a safe, skilfully facilitated environment in which to share stories and offer emotional/practical support to one another. This approach is based on the premise that allowing staff to articulate difficult situations using a structured method can help them grow and move on rather than developing 'compassion fatique'.

### Feedback so far

Debbie Diffey, Clinical Assurance & Training Manager who has been instrumental in developing SCAS' wellbeing approach says: "It can be really difficult to get good student engagement and facilitator expertise when delivering mental health sessions. I am really pleased to be working with Claire and her team who have delivered engaging and innovative sessions. I am delighted with the staff feedback from those who have already attended training and the enthusiasm they have shown. I look forward to working with the Red Lotus team this year on the Compassion@Work Circles and hope this will assist us in maintaining and

supporting the workforce. I really hope we can continue to offer more staff the Mental Health Champions Training this year that has been so enthusiastically received."

### Here's what a couple of delegates had to say:

"Having completed the course I now feel more confident in helping patients that are going through a crisis. I'm hoping they'll feel better supported and know we're here to help them."

"The facilitator was exceptional. Clearly very knowledgeable, engaging and clearly had a passion for the subject matter. I thoroughly enjoyed the course and have not stopped talking about it since."

"Would have scored higher than very good if there was an option! AMAZING! Claire has been fantastic and delivered the course with such humility and understanding. Would recommend this to anyone."

"The instructor made the course.

Engaging, professional, empathetic, informative, enjoyed it far more than expected, learnt so much about people and myself."

The tide is turning in relation to mental health, and forward-thinking organisations like SCAS are leading the way





The more confident and skilled we become in having conversations about emotional wellbeing, the less people will suffer in silence. Sometimes starting the conversation seems like the hardest part, so if you'd like a little help, please visit: https://portal.redlotusconsulting.co.uk/public/form/view/5b97c55e4e6739493a7a5304 to receive a free ebook on '5 Tips for starting a conversation about mental health'.

Red Lotus Consulting's passion extends beyond "just" delivering courses so, to support delegates who attend our courses, we also provide extensive post-course toolkits.

These are crammed with valuable resources to help organisations' resolve to recognise and understand people's day to day mental health and wellbeing needs. They also provide follow-up support for embedding of mental heath first aid and wellbeing programmes within companies we work with.

If you'd like to find out more about how Red Lotus Consulting can help support your service's staff and patient wellbeing agendas, please use any of the contact methods below...

If you'd like to find out more about how to support staff wellbeing, contact Claire Hunter at:

hello@redlotusconsulting.co.uk

Website: www.redlotusconsulting.co.uk

Instagram:

www.instagram.com/redlotusconsulting/

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www.facebook.com/redlotusconsulting /?ref=bookmarks

Spring 2019 | www.ambulancetoday.com 45



# "Waiting on a Friend"



By Jerry Overton

In this column, Jerry Overton- who is viewed by many world EMS and healthcare leaders as one of the best when it comes to improving ambulance systems globally- gives his opinion on the allocation of funding in the EMS system. He identifies some of the issues within EMS systems globally and, whether it's saving ambulance hours or reallocating funds, you can trust Jerry to have a pretty good idea on how to improve on the system.

Oh, a storm is threat'ning
My very life today
If I don't get some shelter
Oh yeah, I'm gonna fade away
-"Gimme Shelter"

Yes, it is a storm that is constantly threatening, and it threatens us all. Cardiac events know no shelter; they do not "fade away". How sadly ironic it is that the emphasis on this issue of Ambulance Today is the recent London Cardiac Arrest Symposium last December, an event that Dec, lover of the Rolling Stones, had planned to cover. This all still just does not make any sense.

As always, the symposium was excellent, and I am sure the specifics will be comprehensively reported elsewhere. From this perspective, the welcome change was less on research and more on resources; human resources. The first, "Community CPR", and second, "Kids Saving Lives", really hit the mark.

This does not mean that cardiac research is not important, because it is. But, at the end of the day, when one considers the amount of money committed to research compared to the amount of money needed to increase

our resources, one wonders if it is not time to discuss priorities.

Back in the day (okay, my day), the initial intervention for an out of hospital cardiac arrest was the precordial thump and if that did not work, there was always intracardiac epinephrine and sodium bicarb. Other meds came and went, depending on the latest research, and sometimes even who did the research. The contents of the drug box varied from system to system and the decisions of the local medical director. Sadly, ROSC rates failed to show any real improvement, whether in the United States, the United Kingdom, or Asia.

Today, every responder knows that two interventions make a difference, timely CPR and timely defibrillation, stressing the word "timely". The question now, though, is what constitutes "timely". It sure is not an eight-minute requirement. As has long been stressed by any paramedic, there will be little difference in outcome if the response time is 9 minutes 1 second rather than 8 minutes 59 seconds.

Response times are outputs, and what is needed are outcomes. And to achieve outcomes, we need resources. That, clearly, requires our most important resource, which is our people. If we really do have money for new programs, it is time to invest in the "research" necessary to seriously examine how we can better recruit and retain those that can change patient outcomes. And if we do not have any "new", perhaps reallocation of funds is in order.

There can be no debate that shaving seconds in telephone CPR instruction is important, but if there are insufficient dispatchers to answer the increasing number of calls, those seconds will make little difference. It is an

underappreciated, almost invisible position, that drives the first link of the Chain of Survival.

The shortage of paramedics is even more acute. In the U.K., a 2017 report by the Comptroller and Auditor General of NHS England, reported 10 percent vacancy rate, with Trusts "struggling to recruit the staff they need and then retain them." The U.S. is facing a similar problem. A recent broadcast from CNBC news reported that in the next six years, a 15 percent increase of paramedics would be required at a time "when unemployment continues to hover near historic lows".

Of course, it is not just the out of hospital care world that is facing a crisis, other sectors of health care are also, and it directly impacts our ability to respond. That same 2017 report by the Comptroller and Auditor General found that in "2015-16, approximately 500,000 ambulance hours were lost due to turnaround at accident and emergency departments taking more than 30 minutes, which equates to 41,000 12-hour ambulance shifts." That is an almost unbelievable (but it is) staggering waste of both human AND financial resources.

Longer hours, more responsibility, higher utilization, fatigue, inequitable pay, and, of course, working conditions when considered together would make any sane person wonder why another sane person would ever consider making the commitment to a dispatcher or paramedic. The answer is, obviously, EMS personnel give a damn.

All too often, that is forgotten. It was just under three years ago that the first European congress dedicated to EMS was held in Copenhagen, EMS2016. The theme of that congress, and the

### Jerry Overton's Letter from America

subsequent congresses, was "It takes a system to save a life," and indeed, it does. But the foundation for that system, or any system, is its people. In other words, without you, it is nothing.

That is my point. If we are ever to increase cardiac arrest outcomes, it will be done by human resources that have the education, experience, and motivation to make a difference. Telephone CPR does little good if a call goes unanswered. A medication has little impact if there is no paramedic to administer it.

Just like human resources, economic resources are limited. And it is a basic tenet of EMS that "nothing in life is free". That includes community and kids' CPR. Wisely using the financial resources that we do have is key, and if that means reallocating research grant funds away from the latest in drone delivery systems that could potentially increase survival

one-half of one-half percent (yes, that is sarcasm), it needs to happen if those same funds can help us better find the keys to retain the human resources that WILL make a difference (No, I am not naive, higher wages is definitely a major key!!!).

And just when you think that all of us have at least a basic understanding for the need for a resource, any resource, that can respond and make a difference, comes this from the western section of the United States. It seems that officials in a Pacific Northwestern state have decided that call taking in dispatch centers has become so structured, and telephone CPR so protocol driven, that they are proposing a rule change that would permit local agencies to no longer require its dispatchers to be certified in CPR. Yes, you read that correctly, public safety responders will not need to know CPR.

It is not like a fellow dispatcher has not arrested in a control center, because it has happened. It is not like a fellow public safety officer has not arrested at headquarters, because it has happened. And it is not like a dispatcher has never witnessed a cardiac arrest as a layperson, because it has happened. Whether the proposal passes will be decided in early spring. And, interestingly, most local public safety agencies are AGAINST it. Perhaps those state officials need to take a step back and consider this from the Rolling Stones. It certainly fits.

You can't always get what you want
You can't always get what you want
You can't always get what you want
But if you try sometimes well you just
might find

You get what you need

"You Can't Always Get What You Want"



### Accidents are no film sets



By Thijs Gras

EMS staff have enough to deal with when responding to a call, the last thing they need is members of the public making harder work of it. In this column, Thijs Gras explains the difference between 'innocent inquisitiveness' and 'sick sensationalism' when it comes to the scene of an accident.

We got a call: probable resuscitation in a tram. When we arrived we found a man of about 70 years lying on the ground in a tiny space inside the tram. It was cold and rainy, so carrying him outside was not an option, at least not without proper preparation for which we had no time. The police were already performing CPR, all the passengers were out of the tram. We pulled the man a little under to create a bit more space and took over the resuscitation. While I was ballooning the man I suddenly noticed someone on the outside, looking curiously through the window of the tram as to what we were doing there. I was amazed and so were the police. After this guy was chased away, only a couple of moments later a woman took over. She gazed inside.

Now I must admit I have a certain degree of understanding, people being inquisitive when something happens involving lights and sirens. Mankind is naturally curious. In my younger years hearing the fire service accelerated my heartbeat and if I knew where they were going to, I went as well. A fire is fascinating to see. Smoke and flames, lights and sirens attract attention, which generally is okay, as long as you do not come too near or hamper rescue and/or fire fighting operations.

Labelling it positively, one could refer to this as interest in the community, in society, in other people. The attraction could even have an evolutionary use: it is a way to mobilize help and assistance. It is only relatively recently that rescue and emergency medical care outside the hospital is professionalized and trusted to specially trained people from dedicated organizations and services. But even nowadays we value first responders and bystanders because they have one big advantage over the professionals: time. Professionals need



to be informed there is a problem, find out where it is and who should be handling this, and then alert the required units to rush to the scene. All these steps take time, so having people around to extinguish a fire, control a bleeding or perform CPR may be of great value.

But there are boundaries. Some people prefer filming to rendering first aid. This is ridiculous of course. Even after emergency services arrived on the scene and are doing their job, people may come very close, sometimes too close for comfort. Being a historian, I went through a lot of pictures of accidents. One would be amazed by the number of people watching accidents on some of the older pictures. Apparently this is of all ages. In the Netherlands we call this 'disaster tourism'.

But do not forget, it may be dangerous! Even in The Netherlands we had a nasty experience in this field with the big explosion of a firework factory in the town of Enschede in May 2000. Among the 22 fatalities (including four fire fighters) and about 950 injured, were a number of people that had come to the incident just out of curiosity.

In recent years cell phones and iPhones have taken sensationalism a step further; everything is filmed nowadays. You make your own reality TV and broadcast it among your friends or nasty

news channels. With a bit of luck your footage goes viral.

Last year in August there was a big collision on one of the Dutch highways. One person was so seriously injured he had to be resuscitated. People were filming everything. They bashed through the accident scene trying to get the best pictures, destroying important marks for the police investigation. They used lanes, marked with red crosses. A car even stopped on the opposite side of the motorway to film the accident, almost causing another accident with an oncoming lorry. Police noted as many registration plates as possible to give these people a big fine. Will they learn?

There are thin lines between innocent inquisitiveness, caring curiosity, sick sensationalism and pathologic papparazionism. The first two are relatively okay and can be dealt with, the other two are not okay and refutable.

As ambulance crews we ask the right honourable members of the public not to film patients and victims. And if you are struggling against the temptation, just reflect before you film: "What if this was me or my mother or my father? Do I want to go viral?" Accidents are no film sets...

Tell Thijs what you think about this article by emailing him at: tgras@xs4all.nl



# 'MDA Teams' app innovates life-saving communication in the smartphone era

Technology applied to the health sector has made immensely positive strides saving lives in the smartphone era - the proliferation of mobile phones within communities has resulted in faster response times than ever before. Emergency services can be notified of incidents significantly quicker with mobile phones than compared to landlines. Smartphone applications have offered the ability to pinpoint the location of callers with a click of a button so that ambulances can arrive on scene as quickly as possible. Now, smartphones can even minimize unnecessary waiting times at the ER during emergencies.

It is only fitting that Israel's (the state affectionately nicknamed the 'Start-up Nation') national emergency medical, disaster, ambulance and blood bank service Magen David Adom (MDA) represents the pinnacle of this trend of life-saving devices and applications. Dating back even further than the State of Israel itself, the organization continues until today as a global leader in EMS innovation, including through the development of smartphone applications that provide simple yet innovative solutions to some of the greatest challenges of modern ambulance services.



One of the Israeli organization's most innovative and recent technological infrastructures is the 'MDA Teams' mobile application. With the goal of minimizing any unnecessary waiting or consultation times before ST-segment elevation myocardial infarction (STEMI) treatments, the app streamlines direct communication between field paramedics, responding ambulances, Magen David Adom dispatch centers, on-call cardiologists and receiving hospitals.

With the click of a button, MDA Teams transmits ECGs and patient vitals, combining the main methods used to bypass the time-consuming emergency department in cases of patients suffering acute myocardial infarction ECG showing ST-segment elevation: utilizing automated ECG/computer interpretation of the ECG and easy transmission to the on-call cardiologists.

For an organization that boasts a 7.6 minutes average response time for ambulances (and half that time for First Responders) it is no surprise that Magen David Adom is also working to cut down on the vital minutes between diagnosing the patient and transporting them to any necessary procedures. Developed in collaboration with the intensive cardiac care units, the Magen David Adom technology has shortened the time from symptom onset to catheterization by nearly 40.3%.

The technology also represents a better process to record and document events securely and directly via the smartphone application. First, on-call cardiologists activate their app to indicate they are on-call. When a mobile intensive care unit is called to a patient having a STEMI, the paramedic can choose the receiving hospitals from a list of hospitals with ICCU and cath labs available. Then. the paramedic can take the ECG and send it securely through the system, also eliminating the risk of a wrong ECG being transferred. The ECG is uploaded via cellular connection from the monitoring device to the patient's file on the server. The app then sends the ECG directly from the patient's file to the cardiologist.

Listed in the application are on-call cardiologists, event date and time, ambulance number, main complaint, nearest hospital, urgency level, region and address of the call and patient destination. App features also include documented calls between the paramedic, regional dispatch, medical consult centers, hospitals and on-call cardiologists, along with ECG record and mapped ambulance tracking

during transport with the estimated time of arrival. In keeping with privacy standards, no phone numbers are shown on the dialing server.

According to Eli Jaffe, PhD, EMT-P, director of training, PR, volunteer activities, marketing and international relations for Magen David Adom, before the application's development, Magen David Adom paramedics "used mobile phones to orally describe the patient, symptoms and the ECG. Since smartphones are currently widely used, transmission of the ECG is possible through personal messaging applications such as WhatsApp."

But this method is not without risks, he noted. "The paramedic may accidentally send the wrong ECG from an earlier patient to the on-call cardiologist, or the paramedic could transmit the ECG to the wrong person, which could lead to a breach in patient confidentiality."

Additionally, photos taken by phone when in a hurry transporting the patient often results in transmitting a blurry ECG. "These methods are neither effective, secure nor documented", said Jaffe. "For a true reduction in the symptoms-to-balloon time, EMS-to-balloon time should have a secure, well documented and effective infrastructure."

Given the grave importance of quick coronary intervention during the deadliest type of heart attack, the combination of clinical diagnosis by trained paramedics and streamlined transportation of the ECG and patient makes the process fast and efficient, substantially decreasing the chance of severe complications, neurological damage, disability and death.

With new smartphone technologies such as the MDA Teams application, such infrastructure is now available to emergency medical teams, yet again highlighting the advantages of mobile tech devices in effectively and efficiently saving lives.

To find out more about MDA: Email: info@mda.org.il www.facebook.com/mdaonline



# **ABCD... QRS!**

IAED's Audrey Fraizer tells the success story of how Jason Carlyon has exceeded his goals in providing CPR training for secondary schoolchildren in Yorkshire, UK, and explains how the now-global Restart a Heart project is saving lives around the world.

Jason Carlyon had the goal of smashing a 100,000 milestone.

And smash it he did, with a record 105,000 secondary schoolchildren in Yorkshire, UK, trained in CPR by Yorkshire Ambulance Service (YAS) ambulance staff and volunteers since 2014.

Carlyon is the YAS Clinical Development Manager and advocate – and that's putting it mildly – for providing CPR training wherever and whenever he can. He started the Restart a Heart in Yorkshire in 2014 and has since become National Restart a Heart project manager for the Resuscitation Council UK (RCUK), which now sponsors the event on a global basis.

Restart a Heart was developed as a designated CPR training day, and since its inception by the European Resuscitation Council in 2013, chronicles a playbook for success. The target audience is now the size of

an entire dartboard of the world and conveys a message that is every bit as welcome as winning the World Rugby Cup: CPR training benefits both the provider and the person receiving the hands-on compressions following out-of-hospital cardiac arrest (OHCA).

There's also a natural enthusiasm implicit in Carlyon's drive behind the project and his stories about people surviving OHCA help promote the event that in 2018 reached secondary schools and the general public. In all, 238,000 people were trained in the UK on the one day set aside (Oct. 16).

"I never dreamed it would grow this big," Carlyon said. "The goal was to get CPR training in the curriculum by introducing it to students and showing the importance of knowing how to do this. Once you learn, you tend never to forget."

The first success story Carlyon and his YAS team celebrated was the

resuscitation of a 15-year-old student who collapsed during a PE class at Fulford School in York six months after the Restart A Heart project was introduced. Two teachers who had attended the training resuscitated the student, Alex Cowes. They called 999 and used CPR and a defibrillator at the school awaiting the arrival of YAS paramedics. Cowes was stabilized and transported to York Hospital where a cardioverter defibrillator was implanted. The teen was back at school three weeks later, in time to sit for exams.<sup>1</sup>

"It was an amazing day," Carlyon said.
"We knew training would be of benefit, but we never expected the benefit going to one of the students."

Initially, schools applied to participate months prior to the October date in preparation of the logistics required, such as volunteer recruitment and equipment. Volunteers arrive en masse to assist, with 900 showing up in 2018 at the 116 schools registered from north, south, east, and west Yorkshire.

The 2018 event featured several cardiac arrest survivors, including 57-year-old Neil Davidson, whose son Oliver provided CPR when Davidson had stopped breathing at his home. Oliver who had learned CPR 10 years earlier while at Rishworth School, near Halifax.

"When I was learning it in school, I was doing it as a precaution, so I knew what to do," Oliver said. "Never did I guess I would have to use it in real life, let alone on my own father."<sup>2</sup>

The Restart a Heart project's success led to partnerships with The British Heart Foundation, British Red Cross,



### Focus on International Academies of Emergency Dispatch

St John Ambulance, and the Greater Manchester Fire and Rescue Services. All UK Ambulance trusts take part, and participation has gone beyond the secondary students trained over the past five years from its appeal to a broader audience. The event brings together cardiac arrest survivors and the people who had provided the lifesaving CPR and attracts sports stars and MPs in Parliament to spread the message. In 2017, for example, North West Ambulance Service's had CPR training stands at the Premier League match between Burnley and West Ham – and a special training session at halftime to ensure all the fans at the match would know what to do in an emergency.

Restart a Heart went global in 2018 with oversight by the International Liaison Committee on Resuscitation (ILCOR) and support from resuscitation councils covering the US, Canada, South Africa, Asia, Australia, New Zealand, and Europe.

Carlyon never imagined Restart a Heart gaining worldwide attention, let alone the numbers of those trained in CPR (in 2018) reaching an estimated 650,000 people worldwide.

The initial goal – adding CPR to the school curriculum – was achieved this past year in legislation mandating CPR and other first aid training in the UK National curriculum, beginning in 2020.

The curriculum is widely supported as shown in a survey conducted by the British Heart Foundation in 2017, prior to the curriculum's approval. Results revealed that an overwhelming 89



percent of respondents believe that CPR should be taught in all schools in the UK. The same survey showed that there is a significant reluctance to perform CPR with 40 percent of respondents stating that they lacked the skills and knowledge to perform CPR.<sup>3</sup>

While a mandated curriculum is a momentous achievement, it doesn't spell doom to Restart a Heart.

Carlyon is simply devising strategy through his project management position at RCUK. A new goal includes using ambulance service (including emergency dispatch) data analyzed by an OHCA Clinical Trials team at the University of Warwick to target areas of high incidence of cardiac arrest. The University of Warwick is a public research university on the outskirts of Coventry, England.

Every year, EMS in the UK attend to about 60,000 people who experience OCHA.

Early recognition of an OHCA is essential and if witnessed by a bystander, the likelihood of the patient surviving to hospital handover and to hospital discharge is four times greater than in cases that are not witnessed.

Emergency medical dispatchers at the Yorkshire Ambulance Service use the Medical Priority Dispatch System™ (MPDS®), developed and maintained by the International Academies of Emergency Dispatch® (IAED™). MPDS v13 features a fast track to "hands on chest" intended for patients who are initially and obviously described as being in cardiac arrest in the Case Entry sequence to further reduce hands-onchest time, which translates into lives saved.



Jason Carlyon

The IAED is the world's foremost standard-setting and certification organization for emergency communications with over 64,000 members in 46 countries. More than 3,000 communication centers in 23 languages employ IAED's protocols and training in medical, fire, and police dispatching.

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For more information about MPDS and the IAED, visit the website at: www.emergencydispatch.org



Spring 2019 | www.ambulancetoday.com 51



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### **Focus on GVK EMRI India**



# Saving lives in ambulance based prehospital care at 108 GVK EMRI, India – A unique process driven approach based on working definition

By Dr G.V. Ramana Rao MD Director EMLC and Research. GVK EMRI

In this column from India, Dr G.V. Ramana Rao explains how GVK EMRI have reduced morbidity and mortality rates across the country using the World Health Organisation's EMS and prehospital trauma care systems. He explains the system in detail and how it makes life easier and saving lives easier for EMS staff.

World Health Organization (WHO) in its landmark 2005 treatise on EMS and prehospital trauma care systems have established the importance of EMS and prehospital trauma care systems in reducing morbidity and mortality from injury and violence and therefore the need and priority for development of EMS systems worldwide. GVK EMRI has saved 2.6 million lives since inception (15th August 2005), by 31st December 2018 with an existing fleet of 6,177 emergency ambulances. The national ambulance services in India are popular as '108 ambulance services', akin to 911 services in USA. These lives saved are out of all the 55 million emergencies attended. They form around 5% of the cases attended in a given month. On an average around 20,253 emergencies are being responded at present. GVK EMRI has been adopting a four point criteria for quantifying the number of lives saved. Criteria being followed are:

- 1. Case should be critical as per list the criteria (Eg. BP less than 90/60mm of Hg) or critical condition list (Ex. a snake bite; falling from a height of over 10 feet in children).
- 2. Medical Direction was obtained from the state level Emergency Response Centre Physician (ERCP).
- 3. Emergency Medical Technician (EMT) has rendered prehospital care as per the protocol which is validated from the PCR (Prehospital Care Record) documentation by the Physician.
- 4. Patient survived as per 48-hour follow-up out-bound call.

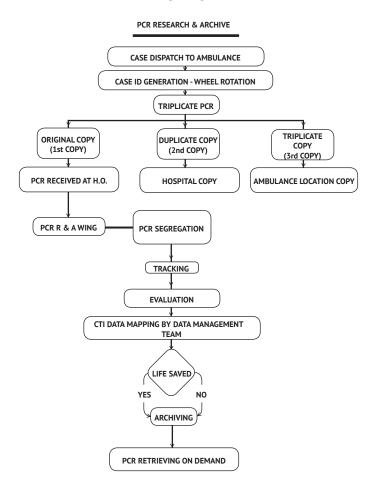
### Focus on GVK EMRI India



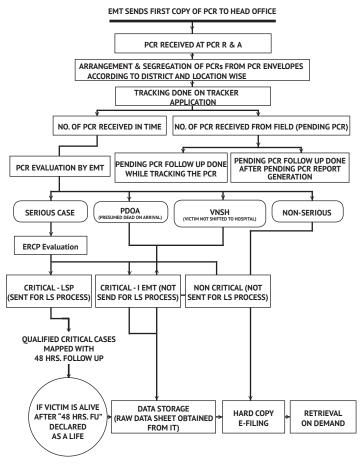
PCR Cell in Gujarat state (photo-2014, GVKEMRI- Research Dept.)

Prehospital Care Record is filled in triplicate. One copy will reach the state level PCR cell. Each PCR is tracked, processed and scanned and hard copies are achieved for retrieval if needed<sup>(2)</sup>.

PCR cell is manned by experienced EMTs and a Doctor. Using PCR tracker and evaluation process, serious cases are identified, Emergency Response Centre Physician (ERCP) evaluates the criticality and assesses whether the case is fit for Life Saved Process (LSP) or not. Qualified critical cases are mapped with 48 hour follow up, the case is declared as "Life Saved", as shown in the diagram given below.



PCR analysis is highly useful in auditing the prehospital care of EMTs. It encourages EMTs to motivate, complete and correct documentation. In the month of December 2018, everyday



it was reported that the average number of lives saved per day was 901. Establishing 'lives saved' as fully evidence based may be difficult in the existing evidence based scientific format, but at GVK EMRI sincere attempts are being made as per the "Working Definition". Disease maps when shown district- wise are often appreciated as being politically correct. Likewise, lives saved process at 108 GVK EMRI ambulance services in India is helping the organization in gaining support from people, government health officials and peoples' representatives. GVK EMRI has the differentiator of carrying out 48 hour follow ups and medical direction by qualified MBBS doctors. Doctors who guide from the state level centre will also support validation of PCR forms for 'lives saved process'. There is an immense scope to refine and re-define live saved process at GVK EMRI. It then means more meaning to the adage that 'running ambulance is operations but saving lives is business' for EMS systems at GVK EMRI India. This is one of the ways planners can ensure that resources spent on prehospital care and other public health interventions produce the greatest possible benefit for the largest number of people.

Reference: 1 .WHO, MRI- PCR Process, 2012.

To find out more about GVK EMRI visit their website at: www.emri.in

Spring 2019 | www.ambulancetoday.com 53



# Building a resilient EMS workforce through programs and policies that improve health and wellness

Around the world, EMS practitioners have much in common, including a commitment to providing the best patient care possible. No matter what country you practice in, EMS practitioners also share some of the negatives that come with the job — namely, potentially high levels of stress that can take a toll on physical, mental and emotional health.

To assist EMS agencies in developing programs that help EMS personnel protect their health and well-being, NAEMT has developed a *Guide to Building an Effective EMS Wellness and Resiliency Program.* The guide presents:

- Steps agencies can take to develop a culture of resilience and wellness.
- Strategies for building resilience among EMS practitioners.
- Suggestions for specific programs and initiatives to support a healthy EMS workforce.
- Tips for EMS agencies on what resilience and wellness initiatives worked for them.
- Ideas for engaging community partners and stakeholders with supporting wellness and resiliency in EMS.

Download the FREE guide at naemt.org.

### How to Build a Resilient EMS Workforce

The greatest asset of any EMS agency is its people – the EMS practitioners and other personnel who are there for members of the community during their worst moments, and who ensure their patients receive high-quality, compassionate and lifesaving care.

However, "being there" for patients and their family members and friends during medical emergencies is inherently stressful. EMS practitioners often work in harsh environments, under difficult, unpredictable circumstances, with limited information, assistance and resources. They may be exposed to risks



such as infectious disease, physical violence, occupational injury, vehicle crashes and death. They may be called on to help victims of traumatic events, which can leave psychological scars on the responders who bear witness.

To effectively handle the stress associated with working in EMS, EMTs and paramedics benefit from having good physical, mental and emotional health. Research shows that mental and emotional well-being lowers the risk of developing chronic physical conditions, while keeping physically healthy can help ward off conditions such as depression, anxiety and stress-related disorders. Resilience is also protective – responders who are resilient can bounce back more easily from adverse events, and more readily adapt to change.

Yet research also shows that some members of the EMS workforce face ongoing challenges in maintaining their mental, emotional and physical health – and that many EMS practitioners believe there is more that EMS agencies can do to help

### Getting Started: Building a Culture of Wellness and Resiliency

A culture of wellness and resiliency begins with an awareness

of healthy lifestyles in the workplace. EMS agencies can help their personnel achieve this by providing educational opportunities, programs and hands-on experiences to address a large array of health and wellness-related topics for employees.

### Attributes of a workplace that supports wellness and resilience:

1. Offers opportunities for connection among employees – Social skills are associated with resilience, and the workplace is often a source of social support. Co-workers may also serve as an extended family. This may be particularly true in EMS, where teamwork is essential and EMS practitioners often form strong bonds. The opportunity to build friendships at work can contribute to a sense of belonging and a shared mission, and may offer support in helping to face challenges.

What can employers do? Employers can offer opportunities for employees to socialize with one another, in a variety of settings, to strengthen friendships and camaraderie.

**2. Supports good physical health –** Physical health is associated with good mental health and resiliency. Getting sufficient sleep, nutrition and exercise can ward off





chronic illness, boost the mood and provide protection from depression. People who are healthy physically are better able to face the emotional and psychological challenges of working in EMS.

### What can employers do to

help? Employers should establish policies and initiatives that promote a healthy lifestyle. Smoking cessation, weight loss programs, opportunities to exercise and fatigue mitigation are a few examples.

**3. Fosters positivity** – Positivity and optimism have been shown to bolster resilience. The work environment

### Defining wellness and resilience

### What is wellness?

Wellness is an active process of becoming aware of and learning to make healthy choices, according to the National Wellness Institute. Wellness means more than simply not being ill; it focuses on keeping your body in good condition to prevent certain chronic diseases. True wellness is proactive and recognizes that each individual has mental, physical and social needs that must be fulfilled to maintain optimal health.

### What is resilience?

Resilience is the ability to cope with stress and adversity without suffering lasting physical or psychological harm. Resilient people bounce back from setbacks. Resilience also provides protection from PTSD (Post-traumatic stress disorder). When faced with a traumatic or stressful situation, resilient people are able to move past what occurred and resume their lives.

Factors associated with resilience include optimism; the ability to stay balanced and manage strong or difficult emotions; a sense of safety and a strong social support system. Some people are naturally more resilient than others. But research shows that resilience isn't a fixed trait. Resilience is a set of skills that can be taught and learned – and EMS agencies play a role in this.



should be one in which employees receive recognition and appreciation for their work.

### What can employers do to help?

Employers should cultivate good morale. Employers can show employees that they are valued by providing positive feedback and recognition for a job well done. Initiatives should also provide opportunities for peer-to-peer recognition – the chance to offer recognition and praise benefits both the giver and the recipient.

**4.** Helps employees adapt to change – Change can be very stressful, whether it's a new company owner or a new way of performing a procedure. As an employer, transparency and a commitment to keeping your employees informed will create an environment in which individuals are better able to accept change.

What can employers do to help? Provide support for employees in adapting to change by getting feedback prior to implementing a change, leading by example, clearly communicating the benefits of the change, and by providing adequate training on implementing the change.

**5. Empowers employees to identify solutions** – Research suggests that individuals with strong problemsolving skills tend to be more resilient. Having a sense of control over one's circumstance also boosts resiliency.

What can employers do? Help employees develop their problemsolving skills. Challenge your employees to make meaningful contributions, set goals and support those goals. Ask for their input and ideas for solving issues or improving conditions in the workplace, and then make sure employees know how their feedback is incorporated into new policies or procedures.

### Signs of Distress

Several recent surveys and studies have shed light on signs of psychological distress among EMS practitioners.

A 2015 survey of EMTs and paramedics published in the *Journal of Emergency Medical Services (JEMS)* found a high rate of suicidal thoughts among EMS practitioners. The survey found that 37% reported having contemplated suicide, nearly 10 times the rate of American adults.

In 2016, NAEMT's National Survey on EMS Mental Health Services found that 37% of EMS agencies provided no mental health support for EMS practitioners, and 42% provided no health and wellness services. Even among those whose agencies provided counseling or resources such as employee assistance programs (EAPs), many EMS practitioners were reluctant to share their struggles for fear of being seen as weak.

A 2017 survey by the University of Phoenix of 2,000 U.S. adults employed as first responders, including firefighters, police officers, EMTs, paramedics, and nurses, found 84% of first responders had experienced a traumatic event on the job, and 34% had received a formal diagnosis of a mental health disorder, such as depression or PTSD. For those diagnosed with depression, nearly half cited incidents at work as a contributing cause.

Researchers from University of Arizona searched Arizona death record data and found from 2009 to 2015, the risk of suicide among EMTs was 39% higher than the general public. Among EMTs, 5.2% of deaths were attributable to suicide, compared to 2.2% of the general population, according to the study published online in September 2018 in *Prehospital Emergency Care*.

To find out more about NAEMT, please visit their website: www.naemt.org

### Focus on NAEMT Education around the world



### NAEMT Education around the world

NAEMT courses are taught to civilian and military emergency responders all over the globe! NAEMT education programs are based on the belief that superior continuing education is essential to the consistent delivery of high-quality, evidence-based medical care. NAEMT education emphasizes critical thinking skills to obtain the best outcomes for patients. We believe that EMS practitioners are better prepared to make critical decisions on behalf of their patients when given a sound foundation of key principles and evidence-based knowledge.









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SINGAPORE | Advanced Medical Life Support (AMLS)

COLOMBIA | Emergency Pediatric Care (EPC)





QUEBEC, CANADA | Geriatric Education for EMS (GEMS)









**MEXICO** | Psychological Trauma in EMS Patients (PTEP)

**USA** | Tactical Emergency Casualty Care (TECC)

### NAEMT Education growth around the world

NAEMT education continues to have steady growth. NAEMT trains more than 113,000 students in 71 countries each year through its network of more than 2,400 training centers and 13,000 faculty members

View the full line of NAEMT courses at: www.NAEMT.org/education.

For additional information about NAEMT education, contact: education@naemt.org.

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# **TASC - Together we are stronger**

TASC (The Ambulance Staff Charity) is delighted to publish our first impact report in March. The impact report is aimed at engaging and informing the ambulance community and general public about the work we do to support ambulance staff and their families. What emerges from the report is the crucial difference that TASC makes to the lives of members of the ambulance community illustrated with just a few stories about the ongoing practical support they provide to those who need it most.

Andy is one of these stories. When Andy suffered nerve damage in his lower body, it meant a sudden and dramatic change of lifestyle. After developing peripheral neuropathy, a condition which causes weakness, numbness and pain, Andy was left reliant on a wheelchair and the man who had helped so many patients now needed help of his own.



TASC funded a new lightweight wheelchair which transformed his daily life and allowed him to try his hand at archery, a sport at which he quickly excelled. Andy, who worked at Two Shires and Beds and Herts until he had to medically retire in 2002, added:

"I was devastated to leave my job. Medication helps with my condition but I'm still in constant pain. When I have a bow and arrow in my hands I can forget everything and live in the moment."

Andy recently received a new car, funded though the Mobility Scheme, which is large enough to carry his wheelchair and, importantly, his archery equipment.



TASC has provided funding for some of the optional extras - such as keyless entry and automatic ignition - to make life that little bit easier for him and regain his independence.

If you would like to know more information about the support we provide, visit our website: www.theasc.org.uk.

At TASC we understand that some of the things our ambulance staff see and willingly deal with each day are unimaginable to most of us. Television documentaries offer only a glimpse. Psychological rehabilitation and counselling, including stress and Post-Traumatic Stress Disorder (PTSD), continues to be one of our most vital and popular services - 4 in 5 of our cases in 2018 involved mental health support. That's why we've increased our provision around mental health and well-being to respond to the surge in the number of cases of PTSD amongst ambulance men and women.

Sue Noyes, TASC Chair, added, "We're immensely proud of the life-changing impact that the work you've helped us fund has had. More than 450 ambulance staff and their families have been offered vital support in the past year, but demand for our services is continuing to grow. We are constantly expanding and developing our services to reach more people more effectively so we can offer the right support at the right time."

## To download and read the TASC impact report please visit: www.theasc.org.uk/about

The impact report showcases the valuable work we do as well and raises awareness of the varying types of support that TASC offer to those in need. At TASC we are truly grateful to everyone who has volunteered, donated or fundraised for us. It is only through the regular support we receive that TASC can continue to provide important services to ambulance staff, past and present, and their families in their time of need.

Here are the many ways you can support TASC:

- Make a single or regular donation online at: www.theasc.org.uk/donate
- Fundraise collections, raffles, make us your Charity of the Year
- Take part in a challenge run, hike, swim... the list is endless
- Donate in memory make an inmemoriam donation at a loved one's funeral
- Donate in celebration mark a special occasion with a donation to TASC's work
- Payroll giving
- Become a corporate partner
- Join in and play the TASC lottery at: www.theasc.org.uk/lottery
- · Leave a gift in your will

If you would like more information in how you can support TASC, email: fundraising@theasc.org.uk or if you would like to become a volunteer please email: volunteering@theasc.org.uk.

# North West Ambulance Service introduces new epaulettes following Arena attack

Advanced medical staff will now be more easily identifiable as North West Ambulance Service (NWAS) introduce red epaulettes for senior clinicians.



The change replaces the former green epaulettes worn on the shoulders as part of NWAS uniform to distinguish roles with the aim to make it easier for ambulance crews to identify a person with more senior clinical skills in the event of a large scale or major incident. This comes after an internal evaluation of the ambulance response to the Manchester Arena attack in May 2017 where staff noted it would be helpful for advanced paramedics, consultant paramedics and doctors to be more easily seen at a glance.

Head of Service and Uniform Group Lead for NWAS, Peter Mulcahy, said: "We have listened to the ideas of frontline staff who responded to the Manchester Arena attack to implement this change across NWAS making it easier for lead clinicians to be identified.

"In a time critical situation with a large ambulance response, this will allow emergency service staff to quickly locate someone who will be able to offer advanced medical skills to benefit patients with more complex needs."

Red inserts for these advanced clinicians are also available for high visibility jackets, which will further increase their prominence.

Green epaulettes for other members of staff including paramedics, emergency medical technicians and senior paramedics will remain the same.

### North East Ambulance Service retains top Stonewall credentials

North East Ambulance Service has retained its place as a top Stonewall employer for the fourth consecutive year.

The Trust, which employs more than 2,500 people, including an estimated 250 lesbian, gay, bisexual and transgender (LGBT) employees, has maintained its position from last year's Stonewall Top 100 Employer shortlisting as the highest ranked NHS Foundation Trust and the







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### **Out & About News**

top performing ambulance service UK wide. It also continues to be the top ranked emergency service in the North East.

Stonewall's Top 100 Employers is the definitive list showcasing the best employers for LGBT staff. The list is compiled from submissions to the Workplace Equality Index, which is an annual audit of the workplace culture and a powerful benchmarking tool used by employers to create inclusive workplaces. Now in its 15th year, the list celebrates the pioneering efforts of leading organisations to create inclusive workplaces.

More than 1,000 organisations have taken part in the Workplace Equality Index since it began. NEAS got involved with the Stonewall Top 100 Employer nine years ago, because the Trust in order to benchmark its equality work against other organisations in the public, private and third sector.

Yvonne Ormston, NEAS chief executive, said: "It's important that people are able to be themselves in the workplace and that we maintain an environment where people feel safe, supported and included. There is strong evidence to suggest that having happy staff leads to improved outcomes for patients.

"We're extremely proud of the work we have done to make sure our service considers the needs of lesbian, gay, bisexual and transgender people and we will continue to work with local communities and the National Ambulance LGBT Network to identify further improvements. Retaining our place in the Stonewall Top 100 index and as the top performing ambulance organisation in the UK serves to recognise this work."



A pride report survey found that 80.6% of respondents would consider working for NEAS, which is an increase of 4.4% compared to 2017. Of the 249 respondents, 89.5% of people said they would recommend the Trust's service to family and friends. Replies from LGBT people that have used the ambulance service state that 97.79% felt they were treated fairly and 98.9% said that staff treated them with dignity and respect.

To maintain the Trust's status in the Stonewall Top 100 Employers list, improvements have been made within the organisation, which included a new policy to help employees better understand transgender issues, new call taker guidance to improve support for transgender and non-binary employees and patients, as well as more engagement with LGBT staff and patients at Pride events. The Trust has also reviewed its family friendly policies, launched a reverse mentoring scheme, provided advice and guidance to HR colleagues, launched a transgender ally programme and improved its collaboration across the region and the UK on LGBT issues.

Yvonne continued, "The framework and feedback we receive from Stonewall surveys helps us to identify the areas we perform well and the areas that require further improvements. It also helps us to attract and retain LGBT people in the workplace and provide them with a safe and supportive working environment.

"Equality, diversity and inclusion are the foundations of the way we work and we strive to create a safe working environment where everyone feels confident bringing their whole selves to work. This also includes treating patients with dignity and respect.

"The Workplace Equality Index provides us with assurance that our approach to LGBT equality is delivering success for employees and patients. This is the best benchmarking tool in class and it should provide people with confidence that our approach is effective."



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# Planning in full swing for Rescue Day 2019

Red hot sunshine and an England football win last summer helped to make the 10th Anniversary of Rescue Day a huge success. Now the planning is well underway for this year's popular annual emergency services event.

Rescue Day 2019 will be held on Saturday 13th July at 7 Lakes Country Park in Crowle, near Scunthorpe in North Lincolnshire and members of the organising team are working hard behind the scenes preparing for what promises to



Lincolnshire & Nottinghamshire Air Ambulance and the National Police Air Service helicopter at Rescue Day 2018

be yet another fantastic day for all the family to enjoy. Favourites including the Red Devils Parachute Display team along with Fire, Police, Ambulance and water rescue teams are already booked and will be performing a range of exciting displays and demonstrations.

Rescue Day showcases the life saving work that our emergency 999 teams and support services do and allows for the general public to engage with staff and volunteers who serve and protect us around the clock. It is the biggest of its kind in the country and attracts crowds in the thousands. The day is hosted annually in the idyllic water and woodland setting of 7 Lakes Country Park and is a huge hit with visitors flocking from across the region and further afield.

The day is organised by a team which includes officers from East Midlands Ambulance Service, Humberside Fire & Rescue Service and HFR Solutions, Humberside Police and staff and volunteers from across the North Lincolnshire area and beyond, all of whom give their time to run the event each year. Chris Long, event Chairman said: "Rescue Day 2018 was another big success and we'd like to thank the organising team, all the organisations that took part, those that sponsor and support the day, our hosts 7 Lakes Country Park, and all the members of the public who come along and make Rescue Day such a memorable annual event. We hope



Crowds watch as emergency and rail teams carry out a rescue operation at a mock level crossing accident.

we continue to encourage people to support our services and also to inspire a new generation of staff who wish to work for our emergency and support teams."

The purpose of Rescue Day is to bring together as many emergency, rescue and support services as possible in one place to demonstrate what they do and how they do it. Raising public awareness of water, road, rail and fire safety, plus health information and first aid skills are all combined with an interesting and fun time at this unique event. The day raises money for charitable causes and has funded life saving defibrillators for many communities in North Lincolnshire over recent years.



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### **Out & About News**

Visitors always have the opportunity to engage with a range of Police, Fire and Ambulance staff, plus Air Ambulance, Search and Rescue and Coastguard teams, Water Rescue units, Highways England, rail companies including Network Rail and Volker Rail, plus road recovery agencies such as Gallows Wood, and see a range of specialist vehicles and equipment close up and in action.

7 Lakes will become a hive of activity on 13th July with a large range of emergency related vehicles on display, with many of the favourite attractions including live action demonstrations that include extremely life like incidents such as road, train, water and aviation rescues. Emergency teams from services across North Lincolnshire and beyond, including colleagues



Water rescue dogs from Pete Lewin's Newfoundlands organisation in action in the lake at Rescue Day 2018.



Red Devils parachutist makes a perfect water landing in front of the Rescue Day crowds.

from West Yorkshire Fire & Rescue Service Urban Search & Rescue Team, Lincolnshire Police, York Rescue Boat, St John Ambulance and more, join together to show multi-agency working. They'll also be emergency vehicles from days gone by on show, plus a range of stalls, games, food and drink and fairground rides.

Four legged friends in the form of Police, Fire and water rescue dogs are big favourites each year at Rescue Day too, as they show off the work they do to help in emergency situations. Animal charities also play a big part in the day and demonstrate various animal rescue scenarios.

Chris said: "Rescue Day 2019 will yet again boast lots to see and do and really is a day that



Regional rescue specialists from West Yorkshire Fire Service Urban Search & Rescue Team and East Midlands Ambulance Service Hazardous Area Response Team undertake a rescue demonstration with a crashed aircraft at Rescue Day 2018.

all the family can enjoy, adults and children alike. We hope those that have been to Rescue Day before will come along again and those that haven't yet been will come and experience this exciting event."

The organising team are inviting stall holders including commercial, charity and voluntary organisations, plus other exhibitors to apply online if they wish to attend this year's event by visiting the website at www.rescueday999.com/exhibitors

More details about Rescue Day, including photos and videos from previous years can be found at www.rescueday999.com or on social media Twitter: @Rescue Day

or on social media lwitter: @Rescue\_Da and www.facebook.com/rescudedayuk.



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**Nikkalite** 





### St John Ambulance takes delivery of 18 new ambulance bicycles for cycle response volunteers as they celebrate fifteen years of saving lives

Reaching the sickest quickest – St John Ambulance now has more than 120 twowheeled ambulances, with the delivery of 18 new bespoke mountain bikes for its Cycle Response Unit (CRU) volunteers, including six to serve London, enhancing the capital's current fleet

The first aid charity's Cycle Responders are deployed at events in communities up and down the country each week and aim to reach casualties quickly. This can include situations where dense crowds make it difficult for a



vehicle to get through, such as at the Notting Hill Carnival, or the Virgin Money London Marathon. Each Cycle Responder rides a customised mountain bike kitted out with enough equipment to make it an ambulance on two wheels – carrying everything from bandages and aspirin, to oxygen and a defibrillator.



Each mountain bike is built to a bespoke standard by London-based bicycle specialist havebike. havebike have built more than 130 bicycles for St John Ambulance and are the emergency services partner to all 999 organisations serving the capital.

Ashley Sweetland MBE, National Cycling Officer at St John Ambulance said: "2019 marks the fifteenth anniversary of our Cycle Response Units, which are on track to support more than

1000 events in communities across the country this year. As well as the ability to reach patients quickly, volunteering in this way is a great way to make a difference in the wider community."

Cycle Response volunteers are trained as advanced first aiders and must pass a series of tests to become part of the specialist teams. The teams also include healthcare professionals including nurses, paramedics and doctors. They often work alongside NHS colleagues at events, helping to treat patients in hard to reach places. Of course, the volunteers don't just stop being a first aider when they come off St John Ambulance duty, their first aid skills are often used in their local community – at home, in the workplace, or out and about.

London Cycle Responder Gursharanjit Gill, 51, played his own life saving move during the British Chess Championships in Hull in August. He was sitting outside enjoying an extra post tournament game of chess when he spotted a solo paramedic arrive at a restaurant opposite. Gursharanjit excused himself from the game and went over to provide support to the medic and an off-duty police officer who had started CPR on the gentleman. The patient, who had choked on a large piece of pitta bread, is believed to have made a full recovery from the incident. IT Programmer Gursharanjit, who has been a St John Ambulance volunteer since 1995 and a member of the CRU since 2010, received a





letter of commendation for his actions from the Yorkshire Ambulance Service NHS Trust.

Ashley added: "Our CRU volunteers play a key role in making public events a safer place to be, by providing first aid to those who need it working alongside our St John Ambulance volunteers, staff, and NHS colleagues. But, like Gursharanjit, they collectively provide extra community resilience in times of need – they're able to use their skills and respond immediately to help save lives."

For more information on St John Ambulance, including how to make a donation, volunteering opportunities, and details of training for the public, schools and businesses, visit: www.sja.org.uk or call 08700 10 49 50

### Isle of Wight NHS Trust Quality Priorities for 2019/2020

As part of the Trust's Annual Quality Accounts we want to hear what you think the Trust should be prioritising on.

The Quality Account includes details of our chosen Quality Priorities, which are the key areas the organisation will focus on in order to improve the quality of services we provide over the coming year. The Trust has been developing a longer term Quality Strategy to help us make sustainable improvements across all the services we provide.

The reports are published annually by each provider, and are available to the public on the Trust's website at http://www.iow.nhs.uk/Publications/quality-account.htm and on the NHS Choices website at www.nhs.uk.

Following feedback from our staff, patients and the CQC inspection we have identified key areas that staff and patients have told us we need to improve and have broken them down under the headings of safety, experience and effectiveness. We have a range of areas in which rapid sustained improvement is required. Completing this survey will help us focus in on the areas of most importance to patients, carers and our partner organisations.

The Trust has already begun receiving feedback from patients, staff and visitors. Thanks to their responses we have been able to begin identifying the following key areas.

#### **Patient Safety**

Learning from Events – we will tell you when we have made a mistake, investigate fully, implement changes and share any lessons we learn.

#### **Patient Experience**

Dementia; we will improve the care of dementia patients to improve the quality of life and support the development of a dementia friendly island.

Learning from experience; we will listen to our staff, patients, carers, family and staff to continually improve our services.

### **Clinical Outcomes**

Best Clinical Outcomes; we will use best practice care bundles and NICE quality standards to achieve the best clinical outcomes. The survey can be accessed at: https://www.smartsurvey.co.uk/s/IsleofWightNHSTrust\_Priorities\_2019\_2020/

Please rank each priority in order of importance for each section (i.e. for safety, effectiveness and experience).



Stone Hardy is the market leader in the service and repair of tail lifts, passenger lifts, shutters and winches for commercial and passenger vehicles. We offer 24 hours a day, 365 days per year service with teams throughout our regional locations in Bathgate, Bristol, Birmingham, Manchester, London and Northampton.

We currently have 65 mobile tail lift engineers which enable us to provide extremely good coverage within the UK. Our Service vans are well specified in terms of equipment and carry a good selection of manufacturer's parts. Our engineers are well trained, knowledgeable and can deal with most emergency situations.

For more information, please contact Dave Aylott: Tel: 01604 683495 • Mobile 07713 316366 Email: enquiries.sales@stonehardy.co.uk







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### **Products & Suppliers News**



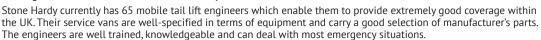
# For further information please contact: Dave Aylott Tel: 01604 683495

Mobile 07713 316366

Email: enquiries.sales@stonehardy.co.uk

### Lift your Standards with Stone Hardy

Stone Hardy is the market leader in the service and repair of tail lifts, passenger lifts, shutters and winches for commercial and passenger vehicles. They offer a 24-hours-a-day, 365-days-per-year service with teams throughout their regional locations in Bathgate, Bristol, Birmingham, Manchester, London and Northampton.



Stone Hardy are agents for all the major tail lift manufacturers, and they have many blue-chip companies as their customers, with a turnover of approximately £10m a year, and a skilled and knowledgeable workforce with a wide range of experience in all aspects of the industry.

In 2016, the company upgraded their facilities in Bathgate by moving to a new site. More than £1 million was invested during 2015-17 in a new fleet of fully-equipped service vans, and six new rapid response vehicles, providing genuine national coverage ability for its 76 engineers.

Technical innovations, such as digital technology and new computer systems, are always being introduced on a rolling basis, bringing the company a long way since its inception 40 years ago.



For information on our vehicle conversions and associated equipment, please visit: www.codebluesv.com

### Go-to suppliers of ambulance conversions

It's been an exciting start to the year for Code Blue SV, delivering advanced, bespoke medical support vehicles to customers old and new. We are seeing increased interest from forward thinking service providers that wish to invest in the quality of their service user's patient journey experience.

Our commitment to aftersales is another reason why we are increasing our market share year on year, free annual planned maintenance and inspections during the 3 year warranty period helps us identify and rectify any issues whether from a vehicle familiarity perspective, prevention of part failure, or identifying any modifications that may need to be made. All warranty issues are attended on site, and we can carry this out during the evenings or weekends if required.

This year we have become part of the 'Veteran owned' network. This network acts as a shop window for Veteran owned businesses such as Code Blue SV. We are also exhibiting at this years Emergency Services Show at the NEC. Sandwiched between two of the largest medical vehicle suppliers in the UK, it's a fantastic opportunity for you to come and see the difference between us and the norm.

### **USED BY MOST UK AMBULANCE SERVICES**

Ask you pharmacist about Water-Jel burn products









For further information on Fleet ID: Telephone: 0344 2098775 Visit: www.fleetid.co.uk Email: sales@fleetid.co.uk

### Fleet ID Limited

Fleet ID Ltd work alongside a number of vehicle converters and end users to provide high quality vehicle livery.

Fleet ID Ltd offer essential services to our clients to help Fleet Managers stay ahead in the most critical areas of their business:-

- ✓ Secure Online Management System Bespoke to All aspects of Livery on their fleet
- ✓ Quality Control Systems which allow us to offer Full warranties on materials and fitting of products
- ✓ Own in house design team that can work directly with each client on any project
- ✓ Fitting Services offered throughout UK & Europe
- ✓ Unrivalled Customer Service with experts dedicated to each industry sector.



For further information please contact Intersurgical at: Crane House, Molly Millars Lane, Wokingham, Berkshire RG41 2RZ

Tel: +44 (0) 118 9656 300 info@intersurgical.com www.intersurgical.com

### Video laryngoscopy wherever and whenever you intubate



i-view<sup>™</sup> is the new single use, fully disposable video laryngoscope from Intersurgical, providing the option of video laryngoscopy in the ER, ICU, maternity or the pre-hospital environment.

By incorporating a Macintosh blade, i-view can also be used for direct laryngoscopy and the technique for insertion is more familiar and instinctive than for devices with a hyper-angulated blade. Its ergonomic design ensures i-view is easy to use, and the integral LCD screen provides an optimal view in a variety of light conditions

By combining all the advantages of a fully integrated video laryngoscope in a single use, disposable product, i-view provides a cost-effective solution. In addition, i-view is ready to use seconds after removing from the packaging.

Visit our dedicated website page www.intersurgical.co.uk/info/iview to view the video, download the information sheet or make an enquiry.



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### **Products & Suppliers News**





#### Contact: Anja Kaufer Head of Public Relations Eberspächer Group Phone: +49 711 939-0250 press@eberspaecher.com

# **Eberspaecher acquires vehicle climate control specialist Kalori**



Eberspacher is the market leader in the supply of complete climate control solutions for all types of Ambulances including A&E and PTS vehicles.

The new 'Generation 2' Airtronic heaters with energy and efficiency improvements to our long standing Airtronic 2kW and 4kW diesel fuelled heaters, are being extremely well received by customers since the recent launch.

With lower power consumption and reduced weight, the new versions have almost doubled the service-life intervals of previous models. Quieter fuel pumps, brushless motors and new CAN bus interface, together with step less heat output providing the ultimate in temperature control.

Climate control systems combine an independent heater with an air conditioning unit to provide automatic temperature control in the vehicle to maintain a constant temperature for the patient and a comfortable working environment for the crew

User controls vary from simple manual control such as the 802 modulator with built in heater diagnostic function, to the fully automatic digital climate controller which offers total temperature control for both heating and air conditioning. Keeping drugs within their critical temperature range within an Ambulance is another problem that Eberspacher has a solution for. The Ambutronic is a 7 Litre, all stainless steel refrigerator, specifically developed for easy installation into

The ever increasing 'Coldtainer' range of portable and mobile Refrigerated Insulated Containers for professional users can be found in daily operation, where critical temperature control of high dependency pharmaceutical, bio-medical, forensic samples and other products are in transit.

If its hot clean water for mobile workers to wash their hands you need, then the Eberspacher Handiwash system will meet your requirements. A cost effective solution to ensure cleanliness is provided in the mobile workplace, meeting essential Health & Safety requirements.



# Body worn video camera solutions for front-line emergency staff



Edesix is a leading UK supplier of Body Worn Camera (BWC) solutions for front-line emergency staff.

The Edesix range of VideoBadge and VideoTag BWCs are used by Healthcare Professionals and hospital security teams to help de-escalate situations, provide evidential footage of incidents, and safeguard staff against false accusations. These cameras are equipped with a range of security features to protect patient and medical confidentiality, even if the device is lost or stolen. VideoBadges and VideoTags are unobtrusive, lightweight and can be fixed to any uniform with a variety of mounting options.

VideoBadges have been proven to reduce aggressive behavior towards those wearing them, whilst acting as a key training and assessment tool, especially for blue-light services.

With one-touch activation, Edesix BWCs leave healthcare professional's hands free to operate equipment and tend to patients, whilst the back-end software ensures footage is secure and the identities of those filmed are kept private via state-of-the-art automated redaction tools.

Edesix is not simply a Body Camera manufacturer; we pride ourselves on providing customers with an all-encompassing scalable solution to improve operations, audit and evaluate performance, manage footage and share video securely.

VideoManager is the most advanced web-based footage management tool on the market, providing a suite of functions available from any location, with heightened security controls and customizable access permissions.

Contact us today to begin a free trial of Edesix Body Worn Cameras or to learn more about how Edesix can help you from one of our industry professionals.



For further information

on Edesix products please

### Webasto Engine Off Technology



### Engine off/Preheat

emergency vehicles.

Emergency vehicles must be in action all year round. But how can man and machine always stay at operating temperature, given the great variations in outdoor temperature? The most common solution in the past: Keep the engine running. The problem: fuel is wasted, engine wear-and-tear increased, operating costs increased.

The efficient alternative comes from Webasto. Thanks to its innovative Engine-Off Technology, the temperature stays constant in the optimum range for both man and technology, even with the engine switched off. Operational availability and driver convenience are ensured at all times. Best of all: cost savings are so enormous that the investment pays for itself within a single year

### Environmentally friendly.

The automatic Engine-Off Technology benefits the environment too. In a double sense. Thanks to the many engine pauses – and to the fact that only this new technology makes use of environment-friendly start-stop systems possible. With a constantly warm engine, restart comes off without a hitch.

### Up to 90% less fuel consumption.

In comparison with idling, considerably less fuel is consumed when the engine is not running. This can pay off in savings of up to 90%.

### Diesel particulate filters stay clean longer.

When idling, the combustion temperature for efficient operation of the filters is too low. So they soil and wear out much faster. Engine-Off Climate systems prolong the life of particulate filters.

### Less wear-and-tear, less maintenance.

Less idling also means less engine wear-and -tear. Engine running times are reduced and, due to fewer operating hours (up to 60%), less maintenance is required while achieving higher resale value.



For an informal chat, call David Stafford on: 01302 381141 or email: david.stafford@webato.com



# Medical Rescue 2019

### RECRUITMENT

MEDICAL RESCUE LTD IS AN ESTABLISHED COMPANY WHOSE CORE BUSINESS IS PROVIDING PARAMEDIC LED CONFINED SPACE RESCUE TEAMS TO INDUSTRY. DUE TO OUR PLANNED WORK IN IN 2019 WE WOULD LIKE TO INVITE FREELANCE BANK OPERATIVES TO JOIN OUR PROFESSIONAL TEAMS.

WE HAVE SEVERAL INTERESTING SERVICE LEVEL AGREEMENTS WITH CLIENTS AND THEREFORE WANT TO FIND THE RIGHT FOCUSSED CANDIDATES TO ASSIST US.

APPLICATIONS ARE INVITED FROM SUITABLY QUALIFIED OPERATIVES AS FOLLOWS:

# HCPC Paramedics - rescue training an advantage IHCD Ambulance techs - rescue training an advantage Rescue Operatives with accredited medical training

APPLICATIONS ARE PARTICULAR INVITED FROM HART TRAINED OPERATIVES OR SUITABLY EXPERIENCED IN INDUSTRY. CONTRACTS VARY IN LENGTH AND THEREFORE IT MAY NOT SUIT THOSE STILL IN FULL-TIME EMPLOYMENT. PAY RATES ARE TASK DEPENDANT AND ARE IN 1 INF WITH CURRENT PRIVATE SECTOR RATES RELEVANT TO YOUR GRADE.

### Please visit our NEW website to post your interest

MEDICAL RESCUE IS AN ACCREDITED CENTRE FOR THE DELIVERY OF MEDICAL COURSES AND CONFINED SPACE TRAINING. SOME TRAINING WILL BE PROVIDED AND A RELIANCE ON COMPLIANCE UPDATE TRAININGWILL BE MADE AVAILABLE.







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