"We are not alone - working together to provide the best possible care"
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Following the successful first national conference, the College of Paramedics decided on a rough date for the next one back in early 2015. It was to be in spring 2016 and I felt sure Yorkshire could host the second conference successfully, particularly given all the time we had to prepare. I was delighted when the decision was made in favour of our region and enthused when the planning actually started to begin.

I’d like to acknowledge Lee Murphy (Paramedic, YAS) for supporting and guiding the College to find a brilliant venue to showcase our county to delegates from around the UK and beyond. The organising committee then got to work putting together an excellent programme with a good balance of subjects - clinical, research and the development of the profession.

I was very pleased that Dr Julian Mark and Dr Dave Macklin agreed to speak at the conference; you can read about their presentations later in this report. Yorkshire Ambulance Service has always been very supportive of the work of the College of Paramedics and this conference was no exception. A special thanks to Angela Harris (Lead Nurse for Urgent Care, YAS) for supporting 12 YAS clinicians to attend the conference, and it is their reflections that made the production of this report possible.

So thank you to the ‘Yorkshire 12’ for being prepared to share their experiences in this way, I’m sure many will benefit and enjoy reading what they have written.

Finally, thank you to Imogen Carter (Executive Officer, College of Paramedics) for the hours spent patiently pulling this report together.
Sometimes I think it is not always evident what the representatives of the College of Paramedics are doing up and down the country and at a national level. I will be working hard, over the next year, to increase the visibility of the vast amount of work done, on behalf of the profession, by College representatives. It is perhaps indicative of the paramedic profession in that we have a ‘just get on with the job’ mentality and don’t shout about what we do.

This is probably why some healthcare professionals still don’t fully understand and value the role of the paramedic. Thankfully though, times are changing and there is acknowledgement from across the wider healthcare community, of the true impact that a well-educated and well-supported paramedic profession can make to the delivery of appropriate and quality out-of-hospital care. The strapline of the conference was ‘We are not alone’, and it was a great opportunity to meet like-minded, enthusiastic paramedics from all corners of the profession and to see the real people behind many Twitter profile pictures. I certainly don’t feel alone in Yorkshire, I have some brilliant colleagues across the county who put in their own time and effort to promote the College of Paramedics and make huge contributions to the development of the paramedic profession. To you all, I am genuinely grateful for what you do in Yorkshire. So please read on and I hope you enjoy this report as much as I enjoy being part of this amazing and unique profession.

Liz Harris
Yorkshire Trustee, Board of Trustees, College of Paramedics
Clinical Development Manager, YAS
Welcome and opening

Gerry Egan, FCPara, Chief Executive, College of Paramedics

The second College of Paramedics National Conference was opened by Gerry Egan, Chief Executive of the College. He thanked the organising committee and conference sponsors for making the event possible.

Gerry spoke about the ‘ups and downs’ for the College since the last National Conference in 2014.

Gerry acknowledged the sad deaths of colleagues and friends of the College. Brian Hayes from London Ambulance Service, pioneer of the “Booze Bus”, the news of whose death had just arrived, Dr Marc Bloch who would be featured in Professor Newton’s Keynote address later in the conference and Dr John Hinds, the Irish motorcycling BASICS doctor, described by Gerry as an “absolute God”. Both doctors have been awarded Posthumous Honourary Fellowships of the College of Paramedics.

Gerry went on to speak of the disappointment for the profession of not achieving independent prescribing for paramedics. However, Gerry was confident that this was just a “hump in the road” and that it will come eventually.

On the up-side, the College has the backing of Health Education England in a project to develop a nationally-recognised scope of practice, curriculum guidance and entry into the profession at degree level. The recent appointment of Graham Harris as the College of Paramedics National Education Lead is the start of this project.

The College recently achieved charitable status, which is a step in the right direction for ‘Royal College’ status. It has a fantastic indemnity insurance policy now and, on feedback from members, College communications have been improved with the launch of the ‘News Digest’. The profession can also be proud of the fact that paramedics can now be found working in various areas, not just ambulance service trusts.

Acting on feedback from the first National Conference, the programme for the two-day conference has a more clinical focus. Gerry felt that, from the “stunning” poster presentations around the room, we would not be disappointed. Gerry encouraged delegates to think of the conference as an “opportunity to share, to get out of it what we put in and to push our boundaries”.

Report by Kim Toon
MCPara, EOC Senior Clinical Advisor, Wakefield
Day one opening address

Dr Julian Mark, Executive Medical Director, Yorkshire Ambulance Service

Dr Julian Mark opened his address with thanks to the College of Paramedics for inviting him to speak at its National Conference in the historic city of York.

A collegiate sense of belonging and responsibility
Julian took us back to his youth in the city, when his school celebrated its 1350th anniversary the year he started school. He said the school had survived that long by moving with the times, creating a collegiate sense of belonging and sense of responsibility to the school and fellow pupils, old and new. This was illustrated by the fact that, as pupils, they were not allowed to celebrate November 5th as Guy Fawkes was an ‘old boy’ and it would be wrong to burn an ‘old boy’.

An NHS under strain
Since its inception in 1948, the NHS has never been under so much pressure and in part it had become a victim of its own success. Our population continues to grow in size and age and is now presenting with more complex co-morbidities.

Julian reminded us of a time, not that long ago, when MI patients were treated with morphine and bed rest, to succumb to heart failure, pneumonia or pulmonary embolism via DVT. Our modern day population however, is more demanding and expects successful interventions in a timely manner. There is reciprocal fall-out from this; that society is not willing to let people die at the end of their natural lives and humanity often loses out to clinical science because individual clinicians feel isolated when making difficult decisions.

Julian argued that the traditional format of primary care is now inefficient, unaffordable and lacking in capacity. Although NHS funding has increased in real terms it has been offset by a catastrophic reduction in social care funding resulting in frail and elderly patients being unsupported in the community and often being taken to hospital - something that they neither want nor need to happen.

Who you gonna call?
Bradley’s report in 2005 and the more recent Keogh ‘5 year forward view’ have a common theme: The Rt Hon. Jeremy Hunt’s “Ambulance Drivers” (we know who we are!) are key to the success of the future NHS. Paramedics are skilled clinicians who are regulated by the Health and Care Professions Council (HCPC); a profession with its own College.

“We are here today to celebrate you and your profession. Paramedics are unique amongst healthcare providers”

We work in the community and see an undifferentiated range of complaints from cardiac arrest to mental health. Emergency department clinicians see the same patients but have the luxury of a fully-equipped department; GPs work in the community but don’t attend emergencies - they call in the ambulance.
service to any patient in need of emergency intervention.

**Under caution**

Julian, very much with his ambulance service medical director hat on, struck a note of caution. He warned that being an “all things to all men” profession has its dangers; the paramedic profession is finite, in high demand but still a profession in its infancy.

Traditionally a statutory ambulance service role, paramedics now have a choice of where they work whether it is in the statutory services, primary care or government departments. Julian maintained that these alternative roles, with increased pay and no 24-hour rota patterns, can look attractive to paramedics but it is important to make sure that they don’t lack the clinical supervision and CPD opportunities that traditional mainstream employers could offer.

Julian acknowledged the challenge for the College, in the current resource climate, to establish frameworks of professional responsibility, so that paramedics are clear of their requirements to remain in good standing. Yorkshire Ambulance Service is actively seeking partnerships with other agencies wanting to employ paramedics rather than watching scarce resources leave their employment. Julian encouraged other ambulance trusts to do the same, with the benefits being obvious to all.

**Hold up the profession with an evidence base**

Julian expressed that, as a profession’s reputation is coloured by its failings rather than its successes, novel developments within the profession need to be governed by ethically-sound research. Yorkshire Ambulance Service now has two full-time research paramedics, which again is something Julian encourages other trusts to invest in. The paramedic profession currently has a vast range of interventions and drug therapies available to us including controlled drugs. However, due to the continued high rates of controlled drug errors across all statutory ambulance services, that are attracting the attention on the Home Office, the Trust Development Authority and the Care Quality Commission, an ongoing review of the freedom under which paramedics give some medications is underway. As chair of National Ambulance Service Medical Directors (NASMeD) Julian is working with these organisations to make sure that this doesn’t result in a ‘backwards step’ for paramedic practice.

**The perceptions of others**

Julian spoke of the noticeable and persistent lack of appreciation, by other healthcare professionals, of paramedics and the skills we employ on a daily basis. A phrase that has been recently used within NHS England circles is “Trusted Assessor” which indicates the findings of one healthcare professional should be taken at face value by another healthcare professional as the patient travels through the system. Since the creation of Major Trauma Networks, a paramedic’s judgement at scene has been accepted when making the decision to bypass local emergency departments to go to a major trauma centre, and in its first year of existence within the Yorkshire and Humber area this saved an extra 90 lives. In sharp contrast, one particular PPCI centre in the Yorkshire region firmly believes that paramedics are incapable of interpreting a 12-lead ECG. Fortunately, this is not a view shared by all PPCI centres within the region.

**All that is green**

The title “paramedic” is protected, however, it is far too liberally used, to the extent that anyone wearing a green uniform is called a “paramedic” not only by the public but by other healthcare professionals. Julian is looking to the College to work with Association of Ambulance Chief Executives (AACE), and in particular NASMeD, to promote the paramedic skill profile and identity amongst our colleagues in health and social care.

**Movin’ on up**

Traditionally there has been a ‘glass ceiling’ for paramedics, with the only way to get through being a career in management. More recently however, a variety of job titles and roles have been created, causing confusion not only across, but also within, ambulance services. This is something that Yorkshire Ambulance Service is trying to resolve by using the College’s post registration career framework (pictured overleaf) which clearly describes career roles and pathways. Julian hopes that all statutory services will adopt the titles and role
descriptions, so that paramedics can develop their careers by moving freely within and between ambulance trusts.

Julian finished by praising the conference for demonstrating the breadth of the paramedic portfolio: “I hope you all leave York feeling a little bit wiser, more collegiate and energised to further work of the profession and the College”.

Report by Kim Toon
MCPara, EOC Senior Clinical Advisor, Wakefield
Day two opening address

John Martin, FCPara, Deputy-chair, College of Paramedics; Director of Integrated Care, Cambridge University Hospitals; Consultant Paramedic

Weeks later it was found that the colleague had been stealing the wheelbarrows! The reason for this story was to make us think about perception, in particular, the perception of our profession, both our own and others.

There are approximately 64,100,000 people in the UK, with the population getting ever older. One in three babies, born on 9 March 2016, will see their 100th birthday. This will inevitably mean an increase in falls and co-morbidities. We already know the number of 999 calls increases year on year while the budget deficit for health and social care also increases. Paramedics are a piece of the health and social care jigsaw, and while there have been many positive changes in our profession, paramedics have the challenge of understanding what is happening around us. We need to think about what has already happened in our lifetimes and how it may change further; as a profession we need to open our eyes to the changing world of healthcare.

A key part of this challenge is deciding how, as a profession, we link into the rest of health and social care. What part do paramedics play in increased integration, and what does integration look like when applied to the whole of the patient journey through the system?

John described a classic example of a patient’s experience of this journey. Eighty-seven-year-old Doris, who had been suffering from a lower respiratory tract infection for which her GP had started treatment in the community, started to become more unwell. It was out-of-hours so she called 111 and described her symptoms, but 111 did not have access to her GP records, they dispatched a 999 response. The crew that attended did not have access to the GP notes or notes from the 111 call, so Doris repeated everything she had told 111, which she found frustrating. The ambulance crew tried to access...
community services for Doris, but couldn’t find any suitable pathway, the time being 22.00 on a Friday evening, so she was taken to the ED. In the ED she was seen by a junior doctor, who wasn’t present during the handover between the crew and the nurse, so Doris repeated her story again. By this time Doris was starting to get confused and forgetful and was admitted to a ward. Over the weekend she was seen by different teams and on the Monday she was referred to the Outreach Team. However, as no one had documented what the paramedic had passed on about her social conditions, she had to remain in hospital until they had been assessed and carers arranged to support her at home. At no point in her journey did Doris criticise the care of the professionals; in her words they were all brilliant. Doris’s frustration was with having to repeat her history time and time again. However, Doris may not have been in the position to see that the lack of integration may have failed her right at the start, when she was still at home.

If Doris had been treated at or nearer home that day, it would have saved the NHS time and money but it is vitally important to remember that, if you are admitted over the age of 85, there is a 48% chance you will die within 12 months and, for every 10 days you spend in a hospital bed, you face muscle wastage equivalent to 10 years. John closed with the news that the Institute of Healthcare Improvement has developed the “Triple Aim” which, as the name implies, is a framework aimed at optimising three prongs of health system performance; to improve patient experience of care, improve quality and satisfaction (and not just the Friends and Family score); to improve the health of populations and to reduce the per capita cost of healthcare.

However, John stressed that as individuals and as a profession we need to keep our eyes open and think about all the ‘pieces of the jigsaw’ and how integration of those pieces can be made a reality.

Report by Kim Toon
MCPara, EOC Senior Clinical Advisor, Wakefield
Keynote address: inaugural Mark Bloch lecture

Professor Andy Newton, FCPara, Chair, College of Paramedics

In inaugurating the tradition of the keynote speech of the National Conference of the College of Paramedics being in honour of Dr Mark Bloch, Andy Newton first gave some background on Mark and his connection with the profession and the College.

Mark Bloch’s sudden death in 2014 represented a sad loss to his many friends at the College of Paramedics. Mark was a tireless advocate for paramedics and the development of paramedic practice. He played a key role in creating the Critical Care Paramedic Programme and was highly regarded as an educator and mentor.

Many paramedics have benefited from his mentoring and coaching expertise and his expert application of clinical simulation technology, where he was regarded as a leading expert. He also generously gave his time providing emergency care to patients in the field, something he found rewarding and which earned him widespread respect among the many paramedics he worked alongside.

His work with the College involved many projects and many more were planned. Mark’s passing is a great loss to the paramedic profession and to patient care.

Mark was a most energetic innovator and teacher and Andy stressed that Mark’s strong motivation was to make a difference to patients both through his own work such as his shifts with a charity providing remote care in South Africa and through his work in developing paramedics. Andy found in all his interactions with Mark that he was a genial and gentle person.

Ambulances services are currently under a great deal of pressure due to high demand, negative press and political tensions. The high work intensity is increasing every year. Andy argued that, as an industry under stress, ambulance services need to find innovative ways of dealing with the pressure in the future. Paramedics have already developed immensely in the past few decades; moving from driver to skilled clinician at a very rapid rate. Andy stressed that, though this development was helped by advocates through the decades such as Douglas Chamberlain and Mark Bloch, it is of major credit to paramedics themselves, as it is quite a feat to make the profession work when developing so rapidly. The process has generally been very successful and is set to continue just as rapidly.

Andy introduced a demand diagram that his colleague has dubbed the fried egg-o-gram (pictured right). In the centre is a very small circle, perhaps a splash of oil has been spat at the yoke; this is the very high acuity incidents; <1% of demand, whose patients are fortunate when served by Helimed crews, as their best chance of survival. The small yolk of the egg is the cohort of patients needing acute medical or trauma care; the focus of which is the majority of paramedic undergraduate training.
Lastly, the largest outer portion is the undifferentiated patients classed as urgent or unscheduled care that, in the past, the GP would have dealt with, but currently are mostly dealt with by paramedics and their colleagues in the ambulance service. So, for paramedics, demand is up, complexity is up and acuity is down.

The desire to move paramedics to work in prevention, early intervention, community and GP services is important, not least due to the numbers of patients but also because it is cheaper for healthcare in general. It is important to future-proof the paramedic profession and increase the primary care skills in this way but it is also vital to increase the critical care skills. Paramedic work is already about decision-making, flexibility, diagnosis, management and diverting patients to the correct place. This is also true when dealing with those few high acuity patients mentioned earlier.

Specialist care is the next step for paramedic practice. The College is conscious of this and the career framework reflects this. The ambulance services, however, have so far only taken forward primary and Hazardous Area Response Team (environmental capability) specialists, with critical care paramedics working in some helicopter services and only being well developed in South East Coast Ambulance Service.

Increasing critical care skills and acquiring the necessary technology is costly and of course this needs to accompanied by research. Critical care paramedics, particularly those using Rapid Sequence Intubation (RSI), are still controversial in the UK, with many differing medical opinions on the issue. Mark Bloch made critical care paramedics happen and there needs to be more medics like Mark to advocate for the paramedic profession as it develops further.

The next development step for primary care paramedics is to be more integrated with the rest of health and social care. For our <1% high acuity patients, who may otherwise die for lack of appropriate expertise and interventions among the paramedic team, it is an increase in the numbers and skills of critical care paramedics that is needed.

Innovation and the development of the paramedic profession is what Mark Bloch championed. I look forward to hearing other Mark Bloch lectures at future conferences and celebrating the distance we travel every year as clinicians and professionals.

Report by Imogen Carter
MCPara, Paramedic, Sheffield and Executive Officer - Policy Development, College of Paramedics
Paramedic perceptions of patients who self-harm

Nigel Rees, MCPara, Head of Research and Innovation, Welsh Ambulance Service

Imagine the self-harmer whose loved one has called us, because they are engaged in minor cutting. The patient refuses to attend ED, the situation escalates and results in the patient being lured outside and detained by the police. Is this outcome desirable for the patient, is it a helpful outcome?

Nigel Rees has worked at all levels of the profession including advanced paramedic practitioner and advanced emergency practitioner. He has contributed greatly to research in the pre-hospital field, including having an active role in the high-profile PARAMEDIC 2 trial. It was his ‘on the road’ experience that led him to choose “paramedic perceptions of patients who self-harm” as the focus of his current PhD research. When he joined the Welsh Ambulance Service in 1989, it occurred to him that whilst the majority of his training was focused on life-threatening conditions and critical care, the bulk of his workload related to low acuity illness, social and mental health problems.

Nigel introduced the audience to the subject by challenging our understating of ‘mental illness’. Could it be that this is just the label that society uses for a set of behaviours that are expressed or used by individuals to cope with emotional hardship? Self-harm is one sub-type of these behaviours, which has many different meanings and purposes, including punishment, releases, distraction from painful emotions and also a form of graphic communication. Nigel highlighted that whilst attempted suicide is a form of self-harm, not all those who self-harm are suicidal or intending to end their lives.

The primary aim of Nigel’s research was to tackle the depth of evidence on this topic, specifically related to the pre-hospital field. His search of the literature revealed just one paper relating to the care of people who self-harm by ambulance staff and that pre-dated the creation of the paramedic role. He hopes that his research can lead to evidenced-based improvements in the education of staff and consequently patient care.

He used a method of research called grounded theory, where he conducted semi-structured interviews with paramedics then coded the transcripts by picking out repeated words and themes. In short, he turned the messy qualitative data (from the mouths of paramedics) into something that could be used and applied. The themes he found certainly fit with my own experiences of working with these patients, colleagues and the police.

One thing he discovered was that often it is not the patients who call 999; it is a concerned friend or relative. This fits with the known statistics that only 10-20% of people who self-harm receive hospital treatment. However, this leads to situations where the patient neither requested
our presence nor wants treatment or to travel to hospital. Bringing about the headache-inducing question of capacity, refusals and best interests; often further complicated by adding alcohol and drug use. As Nigel's interviews showed, this is a recipe for a paramedic scratching their head and reaching for a mobile phone/Airwaves to speak to someone who can help them make a decision. The noises from the Conference audience indicated a universal problem with accessing expert decision-making support.

Nigel highlighted the interviewed clinicians’ rationale for being quick to overrule the refusal of a patient who self-harms, he said that primarily we train and work as ‘life preservers’. This instinct is so strong in us, it’s very difficult to walk away from a patient intent on harming that life. Especially once you feel that your professional registration is irretrievably combined with the fate of the patient. As the quote at the beginning of this article demonstrates, Nigel gave some horribly familiar examples of dubious applications of the Mental Health Act, involving luring patients out of their homes under false pretexts.

It’s not just ambulance personnel who are involved; the police are often automatically requested at self-harm incidents, for the protection of staff and bystanders and to forcibly detain patients without capacity. Nigel spoke of the dramatic increase in the use of tasers by police; 67% of their use was recorded as being on unarmed patients in order to prevent them harming themselves. Whilst I’m sure the officers did this with the best of intentions, it did seem a little ironic to be inflicting severe pain to prevent patients from hurting themselves.

So what is to be done? I don’t think there was a person in the room who disagreed with Nigel’s proposed initiatives to improve care, which included a system of mental health first aid, tailored programmes of pre-hospital education, real pathway development, alternatives to the emergency department and the provision of both mental health telephone triage and face-to-face triage teams. He also proposed that we as healthcare professionals actively step in and take over responsibility from the law enforcement authorities, as these people are patients, not criminals.

The attendees voted that the College of Paramedics sign up to the Mental Health Care Concordat, part of which involves a pledge that any person detained under the Mental Health Act should be transported in an ambulance and not a police van.

Nigel’s talk did not perhaps raise anything controversial. However, he did succinctly give clarity on the nature of the problem and an evidence-based megaphone to all those conversations taking place in ambulance cabs in the UK, where crews are asking ‘there must be a better way to look after these people’.

I am pleased to say that I have started to see the little seedlings of new mental health provisions growing in my working area. They’re not always fully effective, but I hope that work like Nigel’s PhD combined with the efforts of the College and other groups will nurture them into something that really changes the outlook for patients who self-harm.

Report by Hannah Jenkins
Student Paramedic, Yorkshire
Walking the walk – it’s not enough

Paul Gowens, FCPara, National Clinical Advisor, Scottish Government

Paul delivered his presentation with humour and honesty throughout and it was clear from the start that the aim was to rouse and engage the future leadership potential of the clinicians in the audience.

Paul is in a senior leadership role within Scottish Government but he still works as a paramedic. Although things are different when he does shifts on the frontline these days, Paul doesn’t wear rank markings, he is not familiar with the bag checks and he doesn’t instinctively know where the drugs are kept. Whilst Paul is a very experienced paramedic, he doesn’t take senior clinician responsibility and expects to be challenged if his practice is not safe. He wants his paramedic colleagues to feel able to speak up, to challenge regardless of rank or role and have open clinical conversations with each other about the care that we provide.

Paul explained how leadership can be situation dependent; senior leaders must understand their role and not get ‘situation precious’. Having a leadership role in one situation doesn’t necessarily transfer into another situation. Paul highlighted how there is a need for leadership to be present at every level and that there is also a need for more senior clinical leaders to drive the profession forward.

True leadership skill can’t be learnt from a book so Paul gave the delegates his list of the essentials of leadership. Know who you are, your values, strengths and what motivates you. Understand how you learn, grow and regenerate. Understand where and when you can make an impact. Realise your role in growing the next generation.

There was practical advice too for any delegates who were feeling inspired to make a difference; build a network of like-minded people around you to provide support when needed, you need to be able to ‘phone a friend’ for advice when you don’t know the answer.

Finally if you find yourself travelling away from your normal place of work, visiting other ambulances services, other healthcare organisations or other countries then always take a memory stick. Bring back new ideas and share all your learning to make things better.

Paul made reference to some opinions which suggest that the College of Paramedics is an ‘old boys club’. In his humorous style Paul did point out that there are plenty of old people (who wouldn’t be around for much longer!) and blokes who currently represent the College.

But the serious point was that this is because we need more paramedics across the UK to feel able to stand up and get involved with their professional body. The Scottish Government has made a commitment to a 50/50 gender balance by 2020. The College of Paramedics should work towards being more reflective of the profession it represents. We need paramedics to take on
some of the vacant roles within the College of Paramedics to develop the profession further with fresh enthusiasm and to provide resilience for the future.

Paul commented on the Paramedic Prescribing Project and the recent ‘ambulance drivers’ comments in the media and said that it is how we react and how we respond (to disappointment and frustration in particular) that will define us as a profession going forward. Every time you speak about your profession, think about who is listening. Every time you talk about your manager, every time you talk about your service, think about who is listening, how does what you say reflect on you, your colleagues and the paramedic profession as a whole. Think about those around you, your patients and your peers, think about how they feel. Drive things forward, but in the right way.

Report by Liz Harris
MCPara, Yorkshire Representative Trustee
To PEEP or not to PEEP?

Patrick Mitchell, Director of National Programmes at Health Education England (HEE)

PEEP is the Paramedic Evidence-based Education Programme and was the topic of Patrick Mitchell’s presentation at the College of Paramedics National Conference.

“A sample of high-powered stakeholders including paramedics, patient representatives, paramedic practice delivery managers, representatives from guideline and policy and education and training representatives took part in the PEEP study. It was found that a holistic, standardised method of training and education was needed for paramedics.

Paramedics are carefully placed at the forefront of out-of-hospital emergency and urgent care, yet education and training is locally-driven, resulting in different learner outcomes, student experiences and scopes of practice.

“The potential contribution a well-educated and highly-trained paramedic workforce can make to healthcare, through its unique field of practice that intersects healthcare, public health, social care and public safety has yet to be fully appreciated and understood”

Pre-registration education development model

Patrick recommends that there should be a nationally-agreed approach to commissioning and funding of paramedic education and central to this is the partnership between education facility and ambulance trusts.

“There is a lack of knowledge of paramedic’s scope of practice by other AHPs”

Recommendations by Health Education England (HEE) suggest that the paramedic training route should not be as confusing and convoluted as it currently stands. We must move away from different courses, with different learner outcomes and different qualifications like foundation degrees versus diplomas. A review of the paramedic scope of practice will also be considered, which differs from one ambulance trust to another.

What is PEEP?

In recent years, the paramedic role has moved from the historical focus on first aid and transportation, to a greater emphasis on decision-making, treatment and, where appropriate, referral. This increase in clinical capability has led to the realisation that paramedics can make a fundamental contribution to unscheduled and urgent care.
“From 2016 there will be one education level, a standard that is recognisable and transferable”

HEE additions to the pre-registration curriculum:

- dementia and mental health awareness
- clinical leadership skills
- multi-professional learning opportunities
- integrated care
- end-of-life care
- inclusion health
- clinical decision-making.

The HEE has also looked at a ‘pre-degree’, something that is based on traditional nursing courses which saw 70% of those who completed the pre-degree go through to complete the nursing degree. The pre-degree aims to target people who would not normally have the opportunity to enrol on paramedic courses. This is something that Yorkshire Ambulance Service has proudly been part of.

What will happen post PEEP?
It is hoped that a standardised, recognised qualification will bring the paramedic profession in line with similar Allied Health Professional (AHP) and nursing programmes. This will allow further education and development opportunities for paramedics; a clear progression from BSc through to consultant paramedic.

“There is a lack of recognition from the rest of the NHS of the depth and breadth you [paramedics] can do and offer in the health service. We aim to look at the opportunities for current paramedics and not just the fresh, BSc qualified paramedics”

The PEEP programme is much more than the qualification, it is also about looking at the existing workforce for enhanced skills and development. HEE recognise that the ambulance service is integral to urgent and primary care and could have huge benefits for the NHS if development was aimed at reducing costly conveyance.

The table to the right shows the share of current activity to the desired amount. The HEE recognises that more needs to be done to aid the current workforce in these decisions in the form of additional training and progression.

Moving forward
HEE would like to see a 30/70 split for internal progression versus undergraduate routes where by 2020 the BSc will be the recognised standard. It must however be stressed that this will not make a change for current paramedics, who will stay registered and be given the opportunity to gain their BSc.

“Advanced practice planning has already been undertaken, with £1 million being invested in infrastructure and Masters Level qualification”

The progression through to specialised or advanced practice is also a goal of the PEEP programme, not least to provide increased skill at the primary care level. There are also some added benefits of this for staff with more flexibility if moving organisations and greater opportunities to move between different disciplines.

HEE has recognised how important the paramedic profession is for the wider NHS vision and that the profession has already made vast contributions despite a financially tight climate. This recognition of the importance of the paramedic role is paramount to the development of paramedic skills. Our scope of practice needs to be standardised and the undergraduate curriculum clarified in order for this project to be successful. The PEEP programme is the start and an exciting opportunity to make all this possible.

Report by Daniel Lawton
MCPara, Clinical Supervisor, Huddersfield
Improving clinical outcomes and hitting targets - are they mutually exclusive?

Dr Dave Macklin, Executive Director of Operations, Yorkshire Ambulance Service

Dave immediately ensured that delegates were paying attention, informing us that his presentation was interactive and that there was a quiz at the end, but no suggestion of a prize!

He went on to introduce himself as the longest-serving Executive Director of Operations in YAS - all of 18 months. He then introduced the Declaration of Geneva, the oath which he pledged when he entered the medical profession (pictured right), he suggested that in healthcare professions we don’t need an oath but we do need to practice the values within it.

To have good practice we need to adhere to these values despite many challenges; financial pressures, system problems and patient expectations.

Dave went on to talk about quality and shared a quote from ‘liberating the NHS’ which stated that quality is ‘excellence with value for money’. He informed the conference that his budget of £100m doesn’t go far, especially after spending £94m on 2,000 staff wages. Ambulance services therefore have to demonstrate value for money. We don’t always appreciate this in a society where healthcare is free.

Dave stated that there are three areas to Quality and they all have performance targets attached to them; safety, effectiveness and patient experience.

Safety measures are needed to promote a culture of monitoring of safety; humans will always take the path of least resistance and therefore we need these measures to help prevent adverse incidents. He likened it to not having speed limits and the potential consequence of this.
Effectiveness is ensuring the services we deliver are efficient and that those services are providing the best possible evidence-based care.

Dave suggested that patient experience in the ambulance service is difficult to tackle as the patient often doesn’t have a choice when we have to act in a patient’s best interests if they are unable to make a decision or when options are limited.

Dave argued that performance targets are needed as they are directly related to the funding that we receive, we can’t prove what we don’t measure, and when performance is measured it can also be managed. If our targets reduce so does our funding and our standards of care.

He had a specific rationale for time targets being very important in certain conditions. He explained that in Yorkshire there is, on average, 20 cardiac arrests per day and for those with a reversible cause, time matters. He said we have to accept that we do over-triage patients, meaning some patients will be less serious when we arrive.

Also the targets are wrong for certain categories of patient, for example sending a car to a stroke patient to achieve a time target when what they really need is a conveying resource to a stroke unit.

Dave shared what he felt really matters to patients and clinicians through the following quote:

‘You can’t really understand another person’s experience until you’ve walked a mile in their shoes’.

He went on to describe how we all have unique challenges and how it is about being able to understand why we do things in certain ways.

Dave asked ‘how many people have walked in the shoes of a manager? They all have challenges’.

Here Dave raised the key elements of a culture which the Francis Report highlighted as leading to horrendous standards of care at Mid Staffordshire:

- focus on finance
- patient care was someone else’s problem
- defensiveness and complacency.

Dave acknowledged it is integral to his role to create a culture of openness; where mistakes are admitted to, where staff feel supported to speak up and where their managers listen. He also acknowledged that a performance-driven culture can sometimes work against this. He reminded the conference that paramedics, both individually and as a profession, have the ability and duty to speak up and promote a culture of honesty and be the patient’s advocate. He introduced a King’s Fund report that asked ‘do we need more managers or better leadership?’ Dave expressed that we need more paramedic leaders for the future of the ambulance service and that paramedics can influence change by becoming leaders.

Report by Michael Long
MCPara, Paramedic, Yorkshire
Fitness to practise

Andrea James, Lawyer, LHS Solicitors
@HealthRegLawyer

@HealthRegLawyer at #ParaConference16 starts off with some facts and figures about paramedic regulator, @The_HCPC @medic914

Professional Regulation
- Nine statutory regulators in the UK
- Health and Care Professions Council (HCPC)
  - Second largest regulator
  - 1 April 2002
  - 16 professions – 330,887 individuals
  - £26.3m annual income 2014-15
  - £1.6m income from paramedics
  - £1.5m deficit 2014-15
  - 12.5% fee increase 2015

Definition from @The_HCPC on what constitutes fitness to practise
#ParaConference16

Fitness to Practise

“They have the skills, knowledge and character to practise their profession safely and effectively. However, fitness to practise is not just about professional performance. It also includes acts by a registrant which may affect public protection or confidence in the profession. This may include matters not directly related to professional practice.”
Impairment – HCPC Order 2011 (A.22)

(i) misconduct
(ii) lack of competence
(iii) a conviction or caution in the UK for a criminal offence, or a conviction elsewhere for an offence which, if committed in England and Wales, would constitute a criminal offence
(iv) physical or mental health
(v) determination by a body in the UK responsible under any enactment for the regulation of a health or social care profession to the effect that his fitness to practise is impaired, or a determination by a regulatory body elsewhere to the same effect

Andrea James outlines HCPC fitness to practice process #ParaConference16 @YAS_Education @Kirsty_LLR
Fitness to Practise Outcomes 2014/15

- Closed before I/C – 1,042
- 351 concluded cases
  - Discontinued – 15
  - No further action – 7
  - Not well founded - 76
  - Caution – 52
  - Conditions of practice – 39
  - Suspension - 69
  - Struck off/voluntary removal – 93

@HealthRegLawyer at #ParaConference16 reminding delegates that Paramedics are under the ‘Notifiable Occupations Scheme’ for Police actions. @medic914

Fear of the @The_HCPC has cropped up again & again in the last 2 days at #ParaConference16 It’s not warranted. Who is spreading this fear? @ChrisJ999

Lack of competence – has to refer to ‘a fair sample of their work’ not just one unfortunate mistake #ParaConference16 @chrispritchard

Mistakes happen. How we deal with them is what makes us professional. #behonest #ParaConference16 @LukeMarkJones

Not the mistake that matters, how you deal with it that matters. Good take home message from @HealthRegLawyer @myothercarsatvr

Brilliant Blunt Informative Funny Reassuring and Thank You! #ParaConference16 @lizharrisMCPara
Prevention is better than cure - do paramedics have a role in public health?

Linda Hindle, Lead Allied Health Professional - Public Health England

Linda Hindle from Public Health England has been involved in promoting the role of allied health professionals (AHPs) in public health. Like many paramedics I had not spent a great deal of time thinking about my contribution to public health, but Linda’s talk provided plenty of food for thought.

Right now public health is high on the NHS agenda. The NHS 5 Year Forward View of 2014 has highlighted the importance of public health in ensuring the future sustainability of the NHS. Linda emphasised that AHPs can make a significant impact on achieving public health objectives as they will have on average five million contacts with patients on a weekly basis. In addition to this, a survey found that nine out of 10 AHPs agreed their role should include prevention; four out of five said they already incorporate health improvement or prevention into their daily practice; and nine out of 10 members of the public said they would trust healthy lifestyle advice from an AHP.

As paramedics we are in an ideal position to support public health initiatives as we come into contact with patients of all ages with a range of conditions. Linda highlighted specific areas in which paramedics can contribute to public health such as mental health, obesity, physical activity, children, older people, dementia and substance misuse.

Linda gave examples of some of the ways in which paramedics are already contributing to public health including the reporting of incidental findings such as hypertension to GPs, improving falls prevention, involvement in CPR education in schools and signposting patients to services that can help them, such as alcohol support.

So paramedics are already making a significant contribution to public health but there is plenty of scope for improvement. Linda emphasised that ambulance services need to be highlighting the added value that paramedics provide in contributing to public health and that paramedic educators need to incorporate public health into their curriculum. In addition to this, every paramedic has a part to play in improving the provision of public health by talking about their role in public health, evaluating how they deliver public health and thinking about how they can improve the way they contribute towards public health.

Report by Tom Fearnough
MCPara, Urgent Care Practitioner, Sheffield
Partnership working and collaboration - enhancing patient care in Northern Ireland

Ciaran McKenna, MCPara, Clinical Service Improvement Lead, Northern Ireland Ambulance Service

Northern Ireland Ambulance Service (NIAS) is facing similar challenges to other UK ambulance services. An ageing population with chronic and long-term conditions and a societal culture whereby people expect rapid and convenient access to healthcare has seen demand on the service rise on average 3% every year.

The Keogh Report identified the need to improve out-of-hospital services, but closer to home it was the Transforming Your Care and Donaldson reports that prompted change within the Northern Ireland Health Service. The NIAS welcomed this opportunity to change and within the last 18 months there have been dramatic developments within the service.

Prior to October 2014, NIAS operated a traditional model of ambulance service delivery. Every emergency ambulance response resulted in conveyance to hospital unless the patient refused. Staff engagement and collaboration with external stakeholders has resulted in the introduction of 10 new appropriate care pathways which paramedics can utilise as an alternative to transporting to the ED.

The team responsible for implementing the changes identified four key groups with whom collaboration and engagement were essential:

- staff/management (both within the ambulance service and the wider health service)
- patients/service users
- general public
- commissioners.

Multiple focus groups were held across Northern Ireland to provide both frontline and control staff with the opportunity to give their views/ideas on the proposed changes.

One of the key outcomes from these meetings was the development of the Rapid Response Vehicle (RRV) referral pathway. This pathway has resulted in a more efficient use of the RRV as it allows the paramedic to book patient care transport for appropriate patients and leave the scene instead of waiting for an emergency ambulance to arrive.

Ten appropriate care pathways were proposed following our focus group meetings. A process of service user engagement then took place in order to gauge whether these new pathways would meet the needs of our patients. Due to the nature of ambulance work and the fact that we generally only meet our patients once, various organisations such as Diabetes UK, Epilepsy UK and Age NI were used to help facilitate these meetings. These forums enabled us to describe how the new pathways would enhance patient care and the patient experience. It also provided us an opportunity to hear service user views in relation to making referrals either with/without consent.
The general expectation from the public is that once 999 has been dialled, an ambulance will arrive and transport the patient to hospital. It was therefore evident from the outset that good communication would be required with the general public.

A range of tools were used to achieve this including:

- local radio broadcasts
- advertisements in local newspapers
- vehicle graphics
- social media
- leaflet/flyer distribution.

At this time, it is difficult to gauge just how successful this has been but for any lasting effect and to change the expectations of the general public across the UK, there is a need for a national PR strategy and media campaign.

It is important that you understand your audience. Service users and operational staff respond well to patient stories whereas commissioners want to understand how the new pathways would make the service more efficient and cost effective.

The falls pathway was developed following partnership working with geriatricians, physiotherapists, occupational therapists, falls assessors and pharmacists. This pathway is for patients over the age of 65, who have fallen and have been left at home. Paramedics ring the ambulance control room where an electronic referral is made to the falls team. A falls coordinator contacts the patient within two days and undertakes telephone triage. The patient may then be visited by a physiotherapist/occupational therapist in their own home or brought into a multi-disciplinary team falls clinic for review. To date 400 patients have been referred to this pathway with an estimated saving to the health service of £165,000.

In addition to falls teams, NIAS paramedics can also refer to:

- diabetic specialist nurses
- respiratory nurses
- district nurses
- palliative care teams

They can also access:

- minor injury units
- cardiac cath labs
- frail/elderly assessment units
- an alcohol recovery centre.

Success is built on relationships. Continued engagement, partnership working and collaboration benefits the patient, the ambulance service and the wider NHS.

Report by Ciaran McKenna
MCPara, Clinical Service Improvement Lead, Belfast
Chris Preston, MCPara, Advanced Paramedic, North West Ambulance Service

The clinical holding of children

Chris is an Advanced Paramedic at NWAS with an interest in the management of children and their treatment with non-time critical interventions.

Having recently written his PhD thesis on the subject, Chris presented his research and opinions on the problems associated with delivering care to children who may be non-compliant. Various medical professions, including the Royal College of Nursing, already have clear clinical guidelines on the subject of the clinical holding of children. However, there is no clear set of guidelines to help pre-hospital staff in situations when children are non-compliant. Clinical holding is not clearly defined even where guidelines exist; different terms are used depending on the amount of force used, from supportive holding to restraint.

The lack of guidance creates problems for paramedics in a number of ways. Some children may be very distressed and fearful when faced with an unknown situation and these children may display this fear by seeking comfort from a parent, by moving away from the perceived threat or by crying. Holding a child in these situations may be against the child’s will.

A dichotomy of expectation tends to exist between parent and paramedic in situations where there is a need to administer treatment to a child. Parents often believe that paramedics are trained in the holding of children to administer treatments and the methods required to safely do so, therefore are reluctant to intervene even when they think excessive force is being used. The paramedic on the other hand would likely prefer a parent to hold a child in such a way as facilitates the performance of the required procedure.

Paramedics who choose not to undertake the clinical holding of children may, as a result, arrive at ED without having treated the child, with no formal framework to hang that decision on.

Chris suggested that the clinical holding of children should be a last resort option, when a clear threat to life exists, as suggested by the European Association for Children in Hospital. Whereas others take the view that any holding is tantamount to abuse. The unnecessary holding of distressed children can have long-term effects on how those children then go on to interact with other healthcare professionals such as dentists and doctors and with routine health screening in later life.

The law is very clear on the treatment of children and that clinicians are under an obligation to gain consent or assent from the child for a course of action. Assent involves being able to impart an understanding of the procedure to the child. The child has a right to be listened to and their fears must be acknowledged, understood and addressed.
Ethically we must be able to justify the course of action we choose to take or indeed choose not to take. We need to create a framework to base clinical guidance on, guidance that allows us to back up our decisions.

Who is best placed to write guidelines for paramedics and other ambulance staff to follow? Chris asked for a show of hands to indicate whether the Conference delegates felt that we, the College of Paramedics, should be involved in writing the required guidance. All were in agreement.

Report by Nigel Lambley
MCPara, Urgent Care Practitioner, Sheffield
Mentally healthy

**David Davis**, FCPara, Clinical Lead for the NHS111/Integrated Urgent Care National Workforce Development Programme, NHS England  @DavidDPara

David Davis took 25 minutes and 38 slides to explain to Conference delegates about the mental health issues that the College of Paramedics has been involved with.

While David’s full-time job is being on secondment from South East Coast Ambulance Service to NHS England, his mental health work with the College is voluntary.

**What’s happening for patients around mental health and how is the College of Paramedics contributing to improving practice?**

David explained how members of the College were working hard to improve paramedic services to patients with mental health problems. They have been pushing forward to develop practice such as street triage cars, treatment regimes, NICE guidelines, working with the Crisis Care Concordat and improve treatments for patients with acute behavioural disturbance.

The Mental Health Crisis Care Concordat is a national agreement between services and agencies involved in the care and support of people in crisis. It sets out how organisations will work together better to make sure that people get the help they need when they are having a mental health crisis.

David explained how the Crisis Care Concordat was created in 2014, has 27 signatories and is improving outcomes for people experiencing mental health crisis in England. The College has been formally asked to be a signatory for the organisation.

The Crisis Care Concordat is currently revising and republishing its set of national actions which include initiatives like providing a 30-minute response to patients under a Section 136 so they can be transported in an ambulance rather than a police car or van, trialling the use of non-police, non-healthcare places of safety.

In summary they are a group of organisations standing together across the country to be accountable for delivering and developing the best possible care for patients with mental ill health, particularly around these four main areas:

- access to support before crisis point
- urgent and emergency access to crisis care
- quality of treatment
- recovering and staying well/preventing future crises.

David highlighted the importance of reflecting on our own attitudes and practice. We all get desensitised by the situations we find ourselves in and the response we sometimes get from hospitals and the system as a whole. David made reference to a TED talk by ex-police sergeant Kevin Briggs; Kevin patrolled the southern end of San Francisco’s Golden Gate Bridge, a popular site for suicide attempts. In a sobering, deeply personal talk Briggs shares stories from those he’s spoken and listened to standing on the edge of life. He gives a powerful piece of advice to those with loved ones who might be contemplating suicide - https://www.youtube.com/watch?v=7Clg4mtiamY

David went on to explain how he was chosen to give evidence to the House of Commons Home Affairs Committee on policing and mental health. The College of Paramedics submitted a written report and in summary it explained that:

- Paramedics are often the first point of contact for those with mental health crisis and are well-placed to contribute to care.
- There is an increase in the numbers of mental health cases within each paramedic’s caseload.
• There is a general agreement that there should be further education in mental health for paramedics and the police.
• The College of Paramedics believe that in crisis situations, the paramedic can play the role of patient advocate brokering care for patients by adopting a patient-centred approach. Through education and support, paramedics would be well-placed to agree a care statement with patients. This statement would be informed by the physical, emotional, social and mental health needs of the patient and empower the police, health and social care providers with an agreed plan of care.

David explained how it is encouraging for paramedics that the College was asked to be there to give evidence as being able to have an influence on government policy.

The video of evidence given by David Davis is available here: http://www.parliamentlive.tv/Event/Index/471387ad-c577-4d63-a4ab-9150c83dbd48?in=16%3A25%3A00


David then talked about the mental health of paramedics. He was candid about his own experience of mental ill health which was related to the stresses and traumas of being a paramedic but triggered by a stressful event at home. David went on to examine the challenges for paramedics in staying mentally healthy.

David explained how the first new standalone national newspaper in over 30 years called The New Day wanted to write a piece about violence and aggression encountered by paramedics. It made the front page cover story of the second edition. In the article David explained that he had lost count of the times he encountered violence and aggression in his paramedic career and highlighted the importance of informal counselling and peer support. The paper went on to report the following statistics:

1. 40% of paramedics are physically attacked by the public and nine in 10 become mentally ill.
2. Research has shown our ambulance crews have a rate of Post-Traumatic Stress Disorder (PTSD), 5.5 times that of war veterans from Iraq and Afghanistan.
3. The rate of mental illness is 3.3 times that of the general population.
4. Suicide rate has more than doubled since 2007.
5. Two fifths of ambulance staff say they were violently attacked at least once in 2015.
6. 2.7% of crews had been assaulted more than 10 times in a single year.
7. In 2014 86% of paramedics reported working extra hours.

Is suicide a problem?
We know that in one month last year the Daily Mail reported the following story: Paramedic mother of two, 39, is found dead in her uniform at ambulance station where she worked shortly after returning from holiday -

http://www.dailymail.co.uk/news/article-3193144/Paramedic-mother-two-39-dead-uniform-ambulance-station-worked-shortly-returning-holiday.html#ixzz471gC8bqY

Also The Spectator ran a piece on the pressure paramedics are under, lack of support from their employers and the risk of post-traumatic stress and suicide -

http://www.spectator.co.uk/2014/08/londons-999-emergency/
David went on to provide information on what was being done to support paramedics and ambulance staff to remain mentally healthy. David explained how the Association of Ambulance Chief Executives (AACE), including YAS, is leading some academic research, identifying and sharing initiatives across different trusts, to encourage staff to take up best practice and to promote the work of the ambulance service charity TASC and of the MIND blue light programme in roles to support ambulance service staff.

The Blue Light Pledge
The College of Paramedics has signed a Blue Light Pledge with MIND, which is an agreement to show support to members of the emergency services who are tackling mental health stigma and discrimination within the workplace. The College of Paramedics will support the pledge by promoting and raising awareness of mental health and wellbeing to all members through a range of communications including, articles, blogs and events.

Finally, a message from Michelle Parrington, retired military paramedic diagnosed with PTSD.

- Address any issues early, speak to people and stop things progressing.
- There is no shame, it could be the difference between keeping and losing your job or much worse.
- Employers should create an environment where people can talk about what’s going on without judgment or fear of reprimand.
- Employers should also support and promote good wellbeing in the workplace.

Michelle is the founder of Behind the Mask Foundation -

http://www.behindthemaskfoundation.com/

Michelle launched this foundation to provide a forum for you to talk to a qualified counsellor by email, chat or Skype, from the safety of your home. You will receive the same care as you would if you had physically attended a counselling session. The service will allow you to talk through your journey with a peer support team or a qualified volunteer. So many people are silently struggling with a mental illness.

Having the opportunity to talk to someone else in a similar situation may allow you to develop useful coping strategies. Sometimes just having someone to talk to who understands your situation can be enough.

‘Let’s stay mentally healthy together’

Report by Lee Murphy
Paramedic, East Yorkshire
Teaching new dogs old tricks: integrating advanced skills into a paramedic-led air ambulance

John McKenzie, MCPara, HEMS Paramedic, Lincolnshire and Nottingham Air Ambulance

In 2012, paramedics were recruited on a full-time basis to the air ambulance and given five extended skills. None of which are ground-breaking or new, being used already in hospital, but they were relatively unusual for paramedics to practice.

The five extended skills are three drugs and two surgical skills.

All the drugs are given by patient group directive (PGD) and require CO2 monitoring to be readily available.

The drugs:
- Ketamine - used as an analgesic, sedative and, in stronger doses, an aesthetic. Maximum dose of 60mg, mainly used in isolated injuries.
- Midazolam - used for sedation to aid oxygenation and ventilation. Used mainly for patients with an isolated head injury.
- Flumazenil - used to treat Midazolam overdoses.

The surgical skills:
- Thoracostomy - used when patients have ongoing positive pressure ventilation and a pneumothorax cannot be ruled out. Mostly seen in cardiac arrest following blunt or direct trauma.
- Surgical cricothyroidotomy - used when patients cannot be intubated or ventilated. Probably the most traumatic skill.

All these skills were given at the time on the premise that they would never be used; and they are all old tricks. In the past two-and-a-half years, LNAA crews have performed five surgical airways, 80 thoracostomies, 117 uses of Ketamine, 53 administrations of Midazolam and no uses of Flumazenil.
To keep a record of the clinical skills used, there is a database which is audited every three months. Along with this are quarterly governance meetings to examine whether there has been any inappropriate use of these drugs or surgical skills - so far none have been identified.

John explained that the extended skills gave the HEMS paramedics more confidence in dealing with critical patient; to know when they need to use the skills and drugs and when not to. It built confidence for working within their own limitations and own practice.

Another advantage is that the use of advanced drugs has given them the skills and self-assurance to tell a doctor or another member of the team if they are making a drug error, which is part of utilising crew resource management (CRM) skills. An example of this is that the paramedics are more able to assist with RSI.

Despite the LNAA paramedics working autonomously on the air ambulance, they are not shy in asking for help with their decision-making and it is a daily occurrence that medical support is used as a ‘phone a friend’. Usually this would be when to stop resuscitation of a cardiac arrest, when to give additional analgesics and sedation/intubation advice. Professor Willet stated in a previous conference that in the NHS no decision-making should be isolated. It is a vital part of what the HEMS paramedics do.

To conclude:

- Paramedics can safely use extended and advanced skills in life-threatening situations.
- Paramedics can effectively administer advanced analgesics with appropriate governance and good clinician support in a small team.

The final point of the presentation was promoting that paramedics can do this with good governance and monitoring. This is essential for the mutual safety and reassurance of staff and patients that air ambulance paramedics are using advanced skills and are delivering the best standards possible.

It was a thoroughly enjoyable insight into skills used by HEMS paramedics.

**Report by Andrew Youngson**  
*MCPara, Paramedic, Sheffield*
Improving pre-hospital care of patients suffering adrenal crisis

Karl Charlton, MCPara, Research Paramedic, North East Ambulance Service

Karl believes that the best way to advance paramedic practice is through well-designed and well-conducted research. Karl spoke about the definition of adrenal insufficiency, why we should improve care and the knowledge gap that exists throughout UK ambulance services.

Statistics show that paramedics might see two or three cases in their whole careers. In a survey conducted amongst UK ambulance service staff, 24% of paramedic respondents to the survey admitted to not knowing about adrenal insufficiency and how to deal with a crisis. Worryingly, a high percentage of respondents also withheld treatment.

A survey of the public revealed their concern about the knowledge depth of paramedics and their confidence in being able to deal with an adrenal crisis. Karl’s research proposed an improvement in knowledge and a care bundle for dealing with future incidents, which would directly improve patient outcomes. A better understanding of the condition would also lead to improved adherence to JRCALC guidelines.

Care bundles for adrenal crisis have existed in-hospital since 2003.

Karl’s proposed care bundle was as follows:
- ABCs, including frequent monitoring of BP and IV fluid as necessary
- 100mg Hydrocortisone IM/IV
- BM then IV glucose if necessary
- ECG monitoring.

I really enjoyed Karl’s presentation and its content. I agree with him on his findings and the benefits of knowledge improvement and the importance of a care bundle.
The benefits of end tidal CO2 (ETCO2) monitoring in non-arrest patients

Keiran Bellis, MCPara, Lecturer in Paramedic Practice, University of Central Lancaster

I’ve heard Keiran Bellis speak in the past, he usually lectures on mental health and mental capacity and I’ve always found his presentations to be informative and beneficial for my own practice.

Therefore, I was keen to listen and report on Keiran’s research into the benefits of end tidal CO2 monitoring in non-cardiac arrest patients.

I certainly don’t want to start my review by stating the obvious, but I do think it’s worth reminding ourselves of what ETCO2 represents. Basically carbon dioxide is produced during cellular metabolism and due to its acidic nature needs to be expelled through expiration. The capnogram waveform we see on our Lifepaks, along with the capnometry, the numerical value of the CO2, is a direct correlation for assessing the patients’ respiratory function.

It was in 2014 when a Section 28 Report to Prevent Future Deaths, following an oesophageal intubation, advised on the use of ETCO2 in cardiac arrest to ensure the correct placement of ET tubes. Since then we’ve all become aware of the benefits of ETCO2 both in correct tube or airway placement and in the identification of Return of Spontaneous Circulation and it is now an accepted part of our care and resuscitation efforts.

Keiran’s research sets out to prove that ETCO2, used as a baseline observation in pre-hospital care, can detect wider disturbances in the internal metabolism of the body and therefore improve ongoing morbidity and mortality rates. ETCO2 has significant benefits when utilised in non-arrest scenarios as it can offer care providers with a greater insight into the true condition of the patient compared with just SpO2. One useful instance is if the patient held their breath to simulate apnoea the ETCO2 would decrease while the SpO2 would maintain for a longer period.

Knowing what ETCO2 measures, and recognising the neat waveform on our screens, leads us to the question of which diseases, disorders or illnesses require pre-hospital practitioners to use ETCO2 monitoring and how will this have a long-term benefit to the patient? A natural place to start is to consider metabolic disturbances such as diabetes, a common presentation to the ambulance service.

Keiran picked up on an interesting study surrounding paediatrics and diabetic keto-acidosis (DKA). This study notes that while the absence of ketones rules out DKA, the presence of ketones does not on its own identify DKA without also confirming acidosis. The study identified ETCO2 nasal capnography as being a non-invasive and reliable way of continually monitoring children for DKA as patients with an ETCO2 of >36 mmHg were at risk of DKA, whereas ALL patients with ETCO2 of <29 mmHg were clinically suffering from DKA. It should be acknowledged, however,
children present a challenge to most ambulance staff when it comes to continuous monitoring. Sometimes not even the most impressive of blown-up glove puppets will placate a poorly child and excessive interventions increase stress not just for the child but for everyone.

Keiran noted another study that found ETCO2 levels to be the strongest predictors of in-hospital mortality when compared to five other observations; blood pressure, heart rate, Sp02, temperature and respiratory rate. This study also highlighted a direct link between ETCO2 and lactate levels as an indicator of the presence of sepsis. That children present a challenge to most ambulance staff when it comes to continuous monitoring. Sometimes not even the most impressive of blown-up glove puppets will placate a poorly child and excessive interventions increase stress not just for the child but for everyone.

Keiran noted another study that found ETCO2 levels to be the strongest predictors of in-hospital mortality when compared to five other observations; blood pressure, heart rate, Sp02, temperature and respiratory rate. This study also highlighted a direct link between ETCO2 and lactate levels as an indicator of the presence of sepsis.

Sepsis has been the hot topic of the last few years with the education of early identification and the development of pre-hospital care bundles to reduce mortality. Sepsis is a result of poor perfusion, typically a toxic mix of an increase in lactate levels and metabolic acidosis and the study found a direct correlation between the increase in a patient’s lactate levels and a reduction in their ETCO2.

Other studies have also shown that ETCO2 can help pre-hospital clinicians differentiate between the dyspnoea of heart failure and that of the exacerbation of COPD, with ETCO2 31 mmHg or below being suggestive of heart failure and ETCO2 readings above 39 mmHg indicating COPD.

However, the use of ETCO2 in the pre-hospital environment is subject of debate amongst wider NHS professions, with some suggesting that the role of paramedics is not to diagnose but to treat and transfer to definitive care, which is a clearly an outdated sentiment. As a profession we need to move away from the archaic idea that pre-hospital care from the ambulance service is merely to prevent worsening, and move towards a situation where the long-term and overall benefit for the patient is considered holistically, rather than seeing the pre-hospital portion of treatment in isolation.

For me, Keiran’s presentation was quite enlightening as I had never considered ETCO2 as beneficial in any way other than in a cardiac arrest. ETCO2 monitoring is non-invasive, easy to achieve and is a good predictor of mortality, and indicator of diagnosis and severity in a number of diseases and conditions.

That being said, Keiran made it clear in his summing up that there is more research to be undertaken, especially in the pre-hospital environment. Although he acknowledged a strong trend within the research, Keiran laments a lack of enthusiasm to take this forward, noting that although ETCO2 may not be seen as a clinical priority, dismissing it as a useful baseline observation may well prove to be a missed opportunity.

Report by Chris Wood
MCPara, Paramedic, Sheffield
Pre-hospital factors influencing patient outcome in major trauma: An exploratory study.

Lee Thompson MSc (SR Para), Dr Michael Hill PhD, MA (RGN, RMN)
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Introduction
Major trauma is often life threatening or life changing and is the leading cause of death in the United Kingdom for adults aged less than 45 years (Sukumaran et al., 2005). The Northern Trauma Network (NTN) was introduced in April 2012 which created a paradigm shift in the way the region managed major trauma. Local emergency departments are bypassed by ambulance crews who now transport severely injured patients direct to definitive care at a specialist Major Trauma Centre (MTC). As a maturing trauma system there is a professional and political will to ensure trauma care is delivered efficiently and effectively. It was believed that research undertaken at a local level will identify key areas of practice that will influence patient outcomes.

Method cont.
It was hoped that this approach would allow for the capture of the complex interaction of multiple variables that determine outcomes in pre-hospital care.

SPSS V 21.0 was used in order to facilitate data analysis using a variety of parametric, non-parametric, bi-variate and multi-variate procedures. Secondary data analysis was undertaken in order to examine cross validation of outcome measures and the relationship between mechanism of injury, age, physiology, transport times and skill mix on patient outcomes.

Results cont.
Paradoxically, a trauma patient is more likely to die when a Doctor attends in comparison to those attended by less skilled crews (u = 18.239, p < 0.036). This highlights one theory that emergency call takers and dispatch staff are able to identify those patients who have the most severe injuries and task the most highly skilled resource to these cases.

On-scene times and patient outcomes supports the need to ‘load and go and play on the way’. Time from ‘999’ call to arrival at receiving facility of greater than 83 minutes has a significant association with increased morbidity (U=8725.5, P < 0.043).

There was a significant correlation between increasing age and poorer outcomes (mortality [70 years + OR 1.8, 95% CI 1.1-2.5, p < 0.00]) and morbidity [75-79 year olds U = 1,029, p < 0.011, 80-84 year olds U = 826.5, p < 0.016, and 85 year old + U = 1,383, p < 0.003]).

Conclusion
This exploratory study highlighted that patient physiology, arrival time, time on scene, skill mix and age influence patient outcomes in major trauma within the NTN.
The outcome measures used by TARN (e.g. Injury Severity Score and Glasgow Outcome Score) are valid patient outcome measures which are internationally recognised.
This initial exploration has suggested fruitful lines of inquiry for further statistical modelling of this data.

References:
@lizharrisMCPara
Looking forward to giving everyone a warm welcome and an enjoyable stay in Yorkshire for #ParaConference16

@Kirsty_LLR
How do we interact with other HCPs to ensure patients get most appropriate care #ParaConference16 @consultantpara

@lawton3325
Over 85’s - 10 days in a hospital bed equates to 10 years muscle ageing @consultantpara #ParaConference16

@Danielholland15
Kieran Bellis reminding us of the importance of ETCO2 monitoring not solely in cardiac arrest patients. #ParaConference16

@Danielholland15
Patrick Mitchell presenting a compelling case for BSc entry level for paramedics by 2019 #ParaConference16 @YAS_Education

@lawton3325
Paramedic knowledge of adrenal insufficiency preventing treatment? Bridge the gap with care bundles? #ParaConference16

@lawton3325
Public Health is good professional practice, we can do more! #ParaConference16

@NLambley
Reassuring presentation from @HealthRegLawyer, turn up, say something sensible. #ParaConference16

@Da1bh1dh
Thank you @ParamedicsUK. And thanks to all those involved in the tweeting at #ParaConference16

@Kirsty_LLR
@ParamedicsUK Thank you for a fantastic #ParaConference16 … Let’s keep the momentum and ‘buzz’…
The British Paramedic Journal (BPJ), which is freely available to all College members, is a quarterly electronic journal committed to publishing high-quality research and increasing the evidence-base for the paramedic profession.

The BPJ will feature leading research for ambulance clinicians and is run by paramedics, for paramedics. Some recent articles featured include:

- Should tranexamic acid be routinely available to all UK paramedics for the management of non-compressible haemorrhage in major trauma?
- How do paramedics learn to intubate?
- Mentorship within the paramedic profession – A Practice Educators (PEds) perspective
- A qualitative investigation into paramedics’ thoughts about the introduction of National Early Warning Scores.

To access the BPJ, simply click on the British Paramedic Journal link under member services on www.collegeofparamedics.co.uk or visit the BPJ website http://britishparamedicjournal.co.uk
The College of Paramedics – a registered charity

Members of the College will have already read in Paramedic Insight that the College of Paramedics’ application to the Charities Commission was approved in 2015. The move to charitable status is positive for a number of reasons and is an essential step on the way to achieving Royal College status.

The College of Paramedics will need to appoint a patron and, as a charity, has a much improved chance of attracting someone with national or even international reputation who will be appropriate for the College’s future application to become a Royal College.

The College Board of Trustees has always worked for the good of the membership and the profession. It is now in law that any profit the organisation makes will be ploughed back into benefiting the members and the profession. Trustees of a charity cannot benefit financially and can only claim out-of-pocket expenses (the College Expenses Policy can be found at www.collegeofparamedics.co.uk).

The College could also benefit from a variety of tax reliefs and access to certain funding sources which will help the membership fees stay as low as possible.

The College produces annual reports, complete with audited accounts and an annual return, which can be found on the College of Paramedics website. The aim is to provide a clear picture of the College’s activities and financial position, describing the College’s work to both the public and to funding bodies. Now, as a charity, these reports will be monitored by the Charities Commission, which will provide guidance to support the College with this requirement, helping it to define its aims and activities clearly and to manage its finances well, thus ensuring that it is an effective membership organisation.

The College’s charitable purposes are fulfilled through leading on the continuing advancement of the profession, promoting clinical excellence by supplying and supporting CPD, guiding and supporting paramedic research and sharing paramedic education, practice and research across the worldwide paramedic community through communication and engagement.

The College of Paramedics is a charitable company (with limited guarantee) registered with both the Charity Commission and Companies House. In anticipation of gaining charitable status and to ensure good governance procedures are in place, the College conducted a structural review in 2015. In the first quarter of 2016 the Governing Council became known as the Board of Trustees, which is made up of Representative Trustees and Trustee Officials.

Representative Trustees are full members of the College elected by College members residing or working within the region or sector they represent. Representative Trustees are elected for a two-year period of tenure and are eligible for re-election for two further terms of two years.

Trustee Officials are trustees who fulfil specific roles within the Board such as the Chair and the Treasurer. The majority of Trustee Officials have been appointed from the Board of Trustees on the basis of their relevant experience and skills. They hold the same tenure period as Representative Trustees. Trustees cannot also be employees of the College.

The Board of Trustees sets aims, objectives and strategy for the College in the interests of College members and the paramedic profession. The Trustees, senior employees (the executive team) and staff members all contribute to achieving the aims, objectives and strategy set by the Board in a timely and responsive manner, particularly through the Trustee Officials Committee. Other committees and specialist groups have a remit to carry out specific work and report back to the Board of Trustees. Updated Terms of Reference for both the Board of Trustees and Trustee Officials Committee were approved in February 2016 and will be posted on the College website along with a structural diagram.

Importantly the College has governing documents, which are its Articles of Association and its bylaws and can be found on the College website. The Trustee election and appointment processes are laid out in these documents. The appointment process for Trustee Officials is currently being reviewed and updated by the Board of Trustees, with help from an external charities expert. This will be reflected in the bylaws when completed.
Are you interested in becoming a College Liaison and promoting the College of Paramedics amongst your colleagues?

The College Liaison role is a non-elected voluntary position which is about promoting awareness of the College of Paramedics within the working environment. The role also provides paramedics and student paramedics throughout YAS with access to a recognisable point of contact for information on the College’s purpose, aims and objectives or an avenue through which they will be able to feed views and comments back to the College.

College Liaisons will be regularly updated regarding College initiatives and developments, areas of work and achievements and you will be asked to ensure that such information is made available to your colleagues through communication, posters for notice boards and leaflets.

If this sounds like something you would be interested in then please email membership@collegeofparamedics.co.uk