FACULTY OF
PRE-HOSPITAL
CARE

STUDENT & TRAINEE GROUP

Career Insight

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Career Insight:

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Please tell me about your career pathway?

So, my PHEM career pathway. 18 years ago, people who wanted to get into Pre-Hospital had to find a BASICS organization or something similar and contact them and try work for that service and all the services did their own training because there was no national training system. So, I was in the East of England and Magpas had been around for a long time. They didn't have their own aircraft so were a car-based service, but they did anaesthetics as a level 3 service, one of the few in the east of England at the time. I was an EM registrar and phoned the medical director and said, “I'm interested. What can I do?”

I went and did a couple of ride-alongs with them, saw what they did and applied. There wasn’t a selection process because there weren’t loads of people and it was completely voluntary. I eventually got in and completed two, 9 day residential training courses where they taught their own PHEM curriculum. I got signed off and started volunteering for a couple of shifts a month. It was mostly car-based stuff and then they started using the police helicopter, particularly at night and then they made an agreement with EAAA to use their helicopter before getting their own. I worked for MAGPAS for many years and it was really good and the sub-specialty was developing. Whilst with Magpas I took 6 months out of EM to write the first PHEM curriculum handbook with Rod McKenzie. I was the first FPHC EM trainee to do full time PHEM for those 6 months then went back to volunteering.

Then I joined the military as a reservist so gave up my HEMS for military medicine, still pre-hospital but slightly different. When I started being away with the military less I went back to HEMS and contacted Pam Crispin, one of the deputy medical directors of EAAA at the time and started doing a couple of shifts a month for them. Then the Covid-19 pandemic started and

EAAA appointed me full time and I worked there full time for 6 years.

What inspired you to become involved in Pre-Hospital Care?

People have asked me before and it's not a great answer, but I actually don't remember. I think it started with a TV program back in the day with Gareth Davis on BBC about London HEMS. There was a famous clip of a man who had been run over by a digger and had a flail chest and Gareth Davis turned up with LAA and I remember being pretty inspired by that.

> “I love EM and the resus room is my happy place, but I also always wanted to do things outside of the hospital.”

I did the military stuff and I'm an outdoorsy person and I wanted to do my day job outside; I climb so I've done expedition medicine.

Then receiving patients from PHEM crews in the ED, I was always impressed with their professionalism and what they've done and was quite interested in it. It wasn't one thing or one moment, it was lots of things added up, but I suppose if there was one thing it was experiencing them coming into resus and saying I fancy having a go at that.

What advice would you give to those looking to be involved in Pre-Hospital Care?

It's hard because you need experience to get into PHEM and to get into PHEM you must have experience. I would say working for a HEMS service is the pinnacle and everyone wants to do that, but you can't jump to that, you have to do other stuff to get experience. Use every opportunity, try to get electives, do ride outs with the ambulance service, sign up to GoodSam. Definitely become a first responder, join a CFR scheme because then you'll have experience of going into people's houses. Try to do crowd doctor stuff, it's not always paid but it's good for your CV. So just go and get as much experience as you can doing medicine in whatever form that is, outside of hospital, and actually, that'll build your CV, and then when it comes to PHEM specialty training or PHEM fellow jobs you can show you've been interested for a while.

And it's also doing stuff in your day job, making sure you've got ALS, ATLS and maybe APLS. A lot of the HEMS services have them as essentials. You don't have to have done loads of research, that's really hard, you don't have to have done loads of audit, but a little bit of just having a CV that looks like Pre-Hospital work is something you've sort of been interested in for a while, is probably the way to do it.

What are the greatest challenges involved in Pre-Hospital Care for you?

It's not any harder than being in resus with a really sick patient in terms of the medicine.

I found three main challenges. One is the environment. In a well-lit resus, you can have a really difficult patient, but it's made easy by the fact you've got loads of people who know what they're talking about, and it's lit, and you've got all the kit you need.

> Delivering Pre-Hospital Care in the rain and the dark and the cold, when you can't do the stuff you know you can do normally in hospital, that's a real challenge. You have to be able to think laterally about how you're going to do things because you can't always do what you want where they are.

The second is the teamwork. Everyone likes to think they're a great team player or a great team leader, but actually you can be pretty average at working in a team in hospital and you still deliver really good care for the patient because there's lots of people around but in PHEM, there's only a couple of you. You've got to really know the person you're working with. You've got to be able to still deliver care even if there's few people. And of course, all the rest of the people around you you've never met before, whereas in ED you've met them all. You've just got to be the nice person and just get on with everyone. So that's a real challenge.

I think for me, the third challenge is the moral injury. In HEMS, you normally only go to patients who are dead or dying. Sometimes you throw the absolute kitchen sink at them, and they get to hospital and two days later they die. You do get these amazing wins where, someone who you thought was going to die will come back and meet you at the base. Often you might meet their relatives, which is lovely for their relatives, but actually that compounds the moral injury.

I think it’s really important is to be open to peer support groups and therapy to help build mental resilience and sometimes you have to take time out after a difficult case but it’s better if you’re open with it.

Where do you see Pre-Hospital Care developing in the future?

In two ways, I think, if I'm talking all of Pre-Hospital Care, so not just HEMS.

I think there is benefit in developing the urgent care side. For patients to have Pre-Hospital services, a bit like in Europe, where they can have an urgent care paramedic or a doctor who can come and do things and leave them at home. It reduces conveyance for the ambulance service when actually, they might need a prescription of a beta blocker for example. LAA have the PRU car that does this. A lot of that is hugely beneficial to patients because they don't have to come into hospital. They can also help with anticipatory meds and palliative care.

Scandinavian countries do a lot of the Pre-Hospital doctor services, the HEMS services will help the ambulance service. When you're not on a task and you'll sit in an ambulance, paramedics will ring you up from scene and you can offer them advice, especially patients the crew think might be able to stay at home and it allows a lot less conveyance. And the second thing is at the very tip of the spear of HEMS.

> HEMS is always looking to develop and do more. Previously it was about bringing the emergency department to the roadside but now we are trying to bring critical care to the roadside.

We do the anaesthetic, but we'll put long lines in, we might do some invasive blood pressure monitoring, we give inotropic support so we can hand them over directly to ICU.

The two types of patients HEMS teams most commonly attend are significant head injuries and cardiac arrests. How can we do better with that? People are using brain monitors, deeper anaesthesia, inotropes, all to try and reduce secondary brain injury. For cardiac arrest, ECMO, is 100% the way forward. LAA are already delivering it and other systems all around the country are interested in pre-hospital ECMO for those selected patients. The Dutch services have done it so well with the on-scene trial. I think in five, maybe 10 years, that'll be the accepted gold standard. Paris have been doing it for 10 years. So between 20 and 50% of the patients you put on ECMO go home.

It's selected patients, it's hard to deliver, it's a bit expensive, but if you work with a local ECMO center such as Thames Valley have done some great work in London taking patients who are having CPR to the ECMO center. Why aren't we doing ECMO when London are?

What lessons from Pre-Hospital Care have you applied to your in-hospital practice?

Two things. One, the people side, the human factors, working within a team environment, is something that Pre-Hospital has taught me really well. I'm also a lot less frightened of critical care patients. I used to be really anxious about patients who are really sick. I've now got a lot of clinical confidence because, I know I can look after them for however many hours.

I think towards the end of my career, it's now much more been about the welfare of the staff around me. I'm certainly much more aware about how other people in the teams that I work in are doing. They all have different experiences. They've got different qualifications, obviously the nurses, the paramedics, they all bring different stuff. So it's much more about doing the debrief, doing the learning from the pathology, you know, all that governance stuff that comes afterwards. I want to know about innovations and what we can learn from cases and the people around me.

Acronyms:

ALS: Advanced Life Support
APLS: Advanced Paediatric Life Support
ATLS: Advanced Trauma Life Support
BASICS: British Association for Immediate Care
CFR: Community First Responder
CPR: Cardiopulmonary Resuscitation
CV: Curriculum Vitae
EAAA: East Anglian Air Ambulance
ECMO: Extra-Corporeal Membrane Oxygenation
ED: Emergency Department
ED: Emergency Department
EM: Emergency Medicine
HEMS: Helicopter Emergency Medical Services
ICU: Intensive Care Unit
LAA: London's Air Ambulance
PHEM: Pre-Hospital Emergency Medicine