

## A unique experience: An elective with the Welsh Ambulance Service (WAST)

I was privileged to have the unique opportunity to undertake a four-week elective placement in prehospital care with the Welsh Ambulance Service. Prior to the elective, all my previous prehospital experience had been in the busy urban environment of London. Working with WAST was a fantastic elective opportunity that allowed me to gain valuable insights into prehospital care in urban, rural and coastal regions, and how different this is from the prehospital care I've experienced in London. I was privileged to work with a range of services as diverse as the Hazardous Area Response Team, to coastguards and RNLI, all of whom allowed me to further develop my clinical, communication and teamworking skills.

### **Trapped on the rocks**

The coast in Wales is beautiful. I gazed out at the picturesque scenery, hearing the soft splash of water against the rocks below as the light sea breeze gently ruffled my clothes. I wondered what it would be like to be trapped on those rocks, no longer admiring the scenery but feeling terrified about falling to the dangerous landscape below. I did not have to wonder for long. I had the opportunity to observe the brilliant team of coastguard volunteers rescue a fictional patient from the rocks... and then, to rescue me. Being winched down and back up a cliff for the first time was equally exhilarating and terrifying, but was a hugely useful experience. It allowed me to gain an insight into how patients trapped on the rocks must feel. Despite completely trusting the team and their equipment, it was still a scary experience. The reassurance of the team member who came down to 'rescue' me, and his excellent communication and clear instructions made me feel much more reassured, safer and in control. I imagine this is how patients who are anxious about their health and seeking advice must also feel when they receive the best care and communication from the paramedics, nurses, doctors or non-clinicians who support and treat them.



### **The hidden dangers of the prehospital environment**

Having experienced prehospital care in the urban environment of London, I naïvely thought that the most dangerous possibility was being bitten by an angry dog. On a day with the Hazardous Area Response Team (HART) in Wales, I realised how wrong I was. We discussed the many pieces of PPE and kit owned by HART – for fire, water, CBRN, firearms, major incidents and more. In the evening, just as the shift was ending, we were dispatched to a 10-year-old boy who had fallen 20 feet in an abandoned building. I grabbed my helmet and high visibility jacket and stayed close to the HART team as we walked down a steep muddy slope and climbed up a ladder in the pouring rain. As I crawled into the building through the window, it dawned on me how

potentially dangerous this place was. The patient was on a ledge, at the edge of which was a steep drop further down to the floor, which I could see had several vertical shafts disappearing into darkness far below.

I knew that I would be safe as I was being carefully looked after by the HART team, but almost all of my bandwidth was filled up by ensuring that I didn't fall and become a patient myself. As the patient was stabilised, immobilised for possible spinal injury and extricated with a basket stretcher, I was relieved to emerge from the building, even despite the heavy downpour. While we had been treating the patient, the fire service and specialist rope technicians had prepared a pulley system through which they were able to bring the patient down the ladder in a controlled, slow and safe descent, to reach the ambulance. The communication, teamwork and mutual understanding of roles among the 30 team members including police, fire, rope technicians, HART, paramedics and EMTs, was crucial in facilitating the excellent care provided to this patient, and was in part the reason he did so well in hospital and was discharged with no neurological deficit or significant damage shortly thereafter.

### **The calls behind the headlines**

Bold headlines dominate the front page of the newspapers: "80-year-old man with chest pain waited in an ambulance for 15 hours". But shadowing call handlers and dispatch teams in the call centre showed me the real life calls behind the headlines. From an unresponsive teenager, to a middle-aged lady crying in pain, to a man attacked by a cow – there were so many calls coming in every hour which could all potentially be of high acuity. I saw the skill of the call handlers in managing the huge range of calls and patients. All the while I saw the pressure on the service building, as more and more ambulances stacked up outside hospital and many patients were told they needed to make their own way in. I observed the decisions made behind the dispatch of each precious resource, especially for patients who were stranded in more remote areas, as the HEMS desk clinician returned calls to assess the acuity of each potentially critically unwell patient to decide who in Wales needed the HEMS team the most. With only one major trauma centre in the whole of Wales, I saw the difficult decisions made by the trauma desk, balancing whether to advise clinical teams on the road with a major trauma patient to drive one to two hours to the trauma centre or go to the nearest trauma unit.

### **"There's been a multi-vehicle RTC"**

I was invited to play the role of a paramedic at a Road Traffic Collision (RTC) scenario-based training day for medical students at Cardiff University. I was amazed that learning about prehospital care was integrated into their curriculum, and I think this is something that all medical schools should do, as there is so much to be gained from experiences in prehospital medicine. I participated in multiple scenarios and learnt so much from each, from the value that fire crews bring to each job, to the overwhelming feeling of trying to triage and manage multiple simultaneously unwell patients, to the feeling of running a prehospital cardiac arrest as the only medical team member, to participating in a (simulated) thoracotomy. It was a fantastic day, working with medical students, EMTs, paramedics, police, fire and BASICS teams to both teach others and learn and develop ourselves.





## The value of BASICS

I was fortunate to spend a few shifts with the South Wales BASICS team, MedServe, which is run by volunteer clinicians in their own time. I was able to observe the value the MedServe team added to each job, both in terms of the patients they treated, and the teams they worked with. With the wealth of medical knowledge, the range of collective experiences and the useful advanced skills and equipment, I naïvely imagined that the team would take charge at each job. In fact, it was quite the opposite. We attended a stabbing to the neck of a 40-year-old man, and I imagined the first thing the MedServe doctor would say would be to ask about what had happened and how the patient was doing. Instead he introduced himself to the paramedics on scene and said, “we’ll let you get on with moving the patient; let us know if you need anything, we’re right outside”. He prepared the truck for the team, lowered the tail lift and let the team complete the necessary assessment, before asking whether he could also examine the neck wound and if he could help with anything else. In this way, he let the team on scene lead the patient care, feel in control, and have an opportunity to learn, whilst also providing his experienced input to enhance patient care. The time I spent with MedServe highlighted to me the crucial importance of excellent communication, scene integration and teamwork, alongside the clinical decision-making and management of patients in prehospital medicine.

## A taste of rural prehospital medicine



I spent two weeks amongst the rural beauty of Carmarthen, a town on the backdrop of picturesque mountains, and Tenby, a coastal beauty. On my first shift in Carmarthen, we were dispatched to a cardiac arrest. This was the first cardiac arrest I had been to where we would be first on scene. As we pulled up on scene, we saw two women shouting at us to help and screaming “I couldn’t turn him over”. We ran towards the house but as we did so, a dog ran out, barking at us and trying to bite us. This reminded me of the importance of considering danger before approaching a scene, even in time critical events such as cardiac arrests. On entering the house, we ran up the stairs to find the patient lying in his vomit on the floor in the bathroom. We dragged him out, confirmed cardiac arrest, and started CPR. I had previously performed CPR several times before for patients in cardiac arrest, but usually only for a few minutes at a time. As my mentor placed the pads and started managing the airway, I continued CPR for what felt like an eternity. Finally, the radio again crackled to life: “Your back up RRV is 15 minutes away”. I looked at my mentor and asked incredulously, “15 minutes?!”. She simply replied “That’s a pretty good response time”. This was a huge shock to me. In London, I had been used to having back up within a few minutes at a cardiac arrest. It dawned on me how rural we were, that the nearest response vehicle was 15 minutes drive away from us on blue lights. By the time the RRV paramedic arrived, my arms and legs were aching and I was exhausted but it was a huge relief to see another team member here to help. As more team members arrived, they each brought a new insight to the scene; one member used some innovative techniques to maximise our 360 degree access to the patient, while another reassured us we were doing a great job and made some additional suggestions. This showed me the value of turning up to a chaotic scene second or third, as you have more available bandwidth and team members to optimise both scene management and clinical management.

Another shock of rural medicine came to me the following shift as we were called to an unwell 90-year-old. On assessment, it was clear she was hypotensive, tachycardic and likely septic. As we had arrived on a car, we immediately radioed for the

back up of a truck to blue light her to hospital. While we were waiting and providing appropriate on scene treatment, my paramedic mentor began turning down the oxygen. I asked why; he explained that although we would get the next available ambulance in the region, we did not know when they would arrive, and we only had two tanks of oxygen, so we had to ration the oxygen we had available to ensure we had enough to last until to the arrival of the truck. As someone who had worked primarily in cities before, this was a crazy thought, and showed me the difficult decisions that have to be made when working in challenging situations with limited available resources. It definitely made me have a greater appreciation for the much greater wealth of equipment, resources and people that we have within easy access in the hospital environment.

## A week at the Faculty of Prehospital Care

A key feature of all of my experiences in Wales was that all the teams I worked with were so friendly, willing to get me involved and help me learn and develop. This was also the case during the week I spent at the Faculty of Prehospital Care in Edinburgh. I was fortunate to attend faculty meetings, observe the incredible hard work behind the scenes, and support the DIMC examinations by acting as a patient within the clinical circuits. I met, learnt and connected with likeminded students, fantastic examiners and learnt by observing excellent candidates. It was a brilliant experience and I would love to come back and support the faculty examinations again in the future.



I would like to say a huge thank you to the Faculty of Prehospital Care for allowing me this incredible, once-in-a-lifetime opportunity. Thank you to my supervising senior paramedic, Will Hedges, for organising some fantastic opportunities with RNLI and coastguard teams as well as a variety of shifts with great mentors. Thank you to all the paramedics, EMTs, doctors, nurses, call handlers, fire, police, coastguards, RNLI team, patients, faculty administrators, faculty examiners and candidates who all taught me so much. I have learnt so much from this elective, and the fond memories and experiences I was fortunate to have will always be how I remember the end of an amazing six-year journey at medical school.

