

My name is Amy and I am a 4th Year medical student at the University of Sheffield. I had the privilege of doing a 4 week HEMS elective with MAGPAS air ambulance in June. This elective was an amazing experience and greatly deepened my understanding of pre-hospital care and what is involved in these missions. The staff there were welcoming and got me involved right from the start. I learnt so much and gained insights into reflection and debriefing that will change the way I practice from now on. In this report I hope to be able to share some of my experience and give a snapshot into what a typical day looks like in a HEMS service.



DAY IN THE LIFE

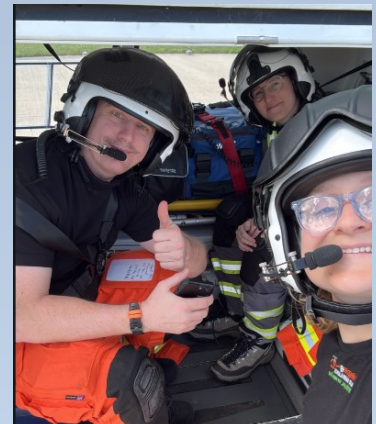
The shifts were scheduled as 07:00– 19:30 (19:00 –07:30 at night) to include handover time however there were times when this would vary depending on the time of a call out . It was interesting to see how different professionals adapted to this with pilots having very strict flying hours and the consideration as to how it would affect the next shift if they went over as they would have to start late. When I arrived I would put on my flight suit, make sure I had the equipment I needed (gloves, work phone, tough cuts etc.) before making my way to handover.

Handover was a quick debrief and equipment (like drug rolls) handover followed by car and heli checks where the kit would be counted, life packs and ventilators checked, and a thorough inspection of the car. After this would be flight debrief looking at Notams, weight and fuel, flying capacity, temperature and available helipads. It was at this point where the paramedics and doctor would discuss who would be operator and who would assist, at Magpas both team members can do both roles.

It was interesting to join one of the pilots on his heli-check which occurs before ours looking at the heli as a machine, and talking through all the physics. I lasted about 3 days before downloading flight radar and finding it fun to track all the different aircrafts.

Kit checks were an important part of a shift and were a great way of learning where the equipment lived and what each bit was used for. Using the checklists to repack and make sure everything was in was a great way to learn the names of the things and how much we used them, as when replacing used kit bags there were patterns of equipment used more often. The checks were to completely detag the bag/bags (due for check) and check all the expiration dates and note how any close to expiring. We often did the drug checks at this time as well.

Getting a job - it starts with the crew alarm bell or being with the doctor when he gets a call through on the emergency phone. At MAGPAS they work with 2 ambulance services EMAS and EEAST this means that when they get a call it is important to inform the other service that were no longer available to be dispatched. The pilot and the doctor then have a discussion about where the job is and while I was there consider things like weight, flying time based on fuel calculations and how far they would need to fly to convey in order to make a decision as to whether to go by air or by land. While this sounds like it would take a long time the actual conversation lasts maybe 30 seconds at most, the pilot would then start the engines while the doctor collected more clinical details. During take off there is silence under 300 ft so the pilots can focus and then discussions about clinical decisions, closest hospitals both local, TU and MTCs could occur.



The job – the jobs varied drastically across the month the most common thing that I attended was cardiac arrests however I also attended, TBI, RTC, medical emergencies, toxological emergencies and more that are less easily defined. After the jobs were done there was always time dedicated to debriefing with the ambulance staff and pilots where decisions and discussions would focus on getting the call to finishing the job to find any learning points or things to consider in the future. I was able to get involved in the field carrying bags, prepping lines, CPR and managing airways. This was an amazing opportunity for me to refine skills, be supported and feel useful while learning from the wider scene and watching the complex decision making and situational judgement required in a range of places. From then, you would return online so free for another call sometimes you would get to base before getting a job sometimes you would get in a police car to the next job as its right round the corner! The number of jobs ranged drastically from no call outs to 4 longer jobs in a day.

Throughout the day while not on calls, general work would be completed any portfolio or clinical learning to do, in these times I worked on my audit mainly. I had the opportunity to be around before a lot of the paramedics and doctors sat their FPHC exams so lots of simulation was done. This was an amazing way to learn and get involved and observe the amazing physicians and see how they handle things and what they're thinking about when making decisions . It was fun to work with them as part of an ambulance team or a bystander in the simulations and gave you an idea of things you might be asked to do on the job and how to do those in the most effective and efficient way.

At the end of a day all that was left was to de-kit the heli and handover to the night crew before travelling home for some sleep before the next shift.

OTHER EXPERIENCES

I also had the opportunity to do some night shifts and a CPD learning day. The focus on this day was about the cardiac arrest desk with EEAST and the use of video technology in bystander CPR and a debrief for the Bedford Major incident. It was so interesting to listen to the innovations and the integration of tech into the pre-hospital world and I'm excited to see what more comes from it and how it rolls out across the country. I was not on shift during the major incident however I was scheduled on the next day and was therefore able to help restock the kit bags and was present for the hot debriefs of some of the teams. The CPD day then covered the cool debrief.

I gained invaluable experience by listening to clinicians and pilots openly reflect on their experiences and answer questions. The willingness to openly critique and challenge colleagues in a supportive manner was not something I had witnessed before. There was no hierarchy in place, and doing it out loud allowed those who did not attend to be able to learn from the same experiences.

The debrief focused on creating a timeline and examining the management, communication, situational awareness, and interagency response of the event, rather than on clinical care. They examined the tools available - window report pack, major incident kit bags, METHANE reports, TST, major incident guidance to evaluate whether they were accessible, used and whether there were any points of improvement. Multiple debriefs were planned and it was clear why a one-off hot debrief would not be enough. Not only were there multiple hot debriefs between different teams, as on a mass response, not everyone is together, and people get split into different groups, emotions and adrenaline are still prevalent, and the pace and amount of critical evaluation is far less, as it was more of a sharing of information, and crews processing what they had witnessed and start to recover themselves from a stressful event.

Seeing this process is an experience that I may never get again and has changed the way I view reflection and I hope to be able to carry this forward into my practice.

CONCLUSION

This placement will definitely be the highlight of my time at medical school. It has shown what a job in pre hospital care is like. Allowed me to fully understand the training process and start to develop thinking around reflection and situational judgement in a much wider range of practice. I learnt an incredible amount during my time and hope to be able to share some of that with my peers, Specifically focussing on multiagency coordination and major incidents.

THANKS

I would like to thank the FPHC for this amazing opportunity and all of the MAGPAS staff for the amazing work that they do and this unforgettable experience. The staff went above and beyond to get me involved and support me during my time and I hope at times I was able to be at least slightly helpful!

