The Faculty of Pre-Hospital Care – Student report from London

Finding solutions for the start-up student pre-hospital care programme



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Introduction

This report is the result of contributions from individual London student prehospital care programmes, and also the results of an anonymous student questionnaire. The aims of the report are to describe how these established programmes have come to be, in the hope that this informs developing initiatives in other parts of the country. Equally, we hope that the data in this report offers motivation for those involved in commissioning medical education interventions to strongly consider the pre-hospital arena as a yet fully utilised resource.

Background

The Faculty of Pre-Hospital Care (FPHC), run out of the Royal College of Surgeons, Edinburgh, aims to set and maintain standards of pre-hospital care practice. It also aims to promote the education of pre-hospital care, and support current practitioners in their best practice.

There is considerable undergraduate interest in pre-hospital care; amongst Medical students but equally amongst Paramedic, Nursing, Midwifery and other health care students. With this in mind, the FPHC instigated the creation of a student committee. The aims of this committee shadow those mentioned above, and in addition are to promote undergraduate education and opportunities in pre-hospital care, and to foster inter-disciplinary student collaboration.

Throughout 2014-2015, an executive of Medical and Paramedical students helped create a regional network of student Faculty representatives. To date, each geographic region of the UK has a regional Faculty student representative who is supported by local representatives from many of the pre-hospital care providers and educators in their locale.

<u>London</u>

London is fortunate to have an established pre-hospital arena, and subsequently there are many student opportunities. These include pre-hospital care programmes run by medical schools, hospitable and supportive local ambulance services, fire brigades and a thriving voluntary sector.

When the regional representative structure was first adopted, the leaders of the undergraduate London pre-hospital care programmes discussed what they could offer the Faculty. Aware that their programmes were considerably more established compared to many of their regional counterparts, the decision was made to offer guidance and support to those areas of the UK which are still finding their footing in this field at an undergraduate level.

Strategy

It was collectively decided that, where able, London medical school pre-hospital care programmes would create reports highlighting four key areas considered fundamental to their successes to date; establishing a training relationship, maintaining a provider relationship, encouraging inter-disciplinary practice and maintaining overall programme longevity.

In addition to these reports, an anonymous student questionnaire was created. This quantitative and qualitative questionnaire aimed to evaluate the extent to which healthcare students value their pre-hospital exposure, and the areas of their medical education they feel benefit the most from its undertaking.

Programme report results

1) Establishing a training relationship

Kings College London pre-hospital care programme

The creation of a fully functional pre-hospital care programme (PCP) relies heavily on establishing formal training links with the appropriate members of staff within relevant training organisations. This task can initially prove challenging, particularly from the point of view of medical schools currently lacking in appropriate contacts.

The most important step in this process is finding a contact within the relevent service (most likely the ambulance service) who is enthusiastic about the programme and willing to put some extra effort in to get the PCP started. A single contact will provide a central link from which further contacts within the organisation can more easily be established. This is absolutely necessary in furthering the programme; an enthusiastic and hard-working contact will make expanding the programme much smoother.

In the context of ambulance services, the pre-hospital care programmes in London, such as the King's College London (KCL) PCP, have the advantage of all operating within the same ambulance service – the London Ambulance Service (LAS). This means that finding contacts within the Service can be achieved by contacting Paramedics from a pre-existing scheme. Whilst these Paramedics are very busy with work from their own programme, they are in a good position to recommend Paramedics or members of staff who are willing and able to take on the role of liaising with a PCP scheme in the relevant geographical area. Schemes operating in the peripheries can utilise these same contacts to start off and to expand their area of operation.

For non-London universities, finding contacts can prove more difficult due to the lack of pre-established PCPs. However, there are a number of alternative options for acquiring contacts. National events relating to pre-hospital care provide a forum for interested staff including Paramedics to attend and to meet, and therefore these events also provide an effective opportunity to interact with contacts who have already (by virtue of attending) demonstrated a further interest in their field. Members of training staff within the university can also often prove a good source of contacts as they often interact with many members of staff in organisations such as ambulance services. Utilising larger networks of contacts may become necessary in order to find an appropriate member of staff.

Once a contact is established the programme can begin to progress. The initial contact (or lead Paramedic) will need to find a number of other Paramedics who are eager to get involved in the scheme and ensure all the relevant staff (such as the ambulance service district station officers) are aware of the scheme. Responsibility to complete all of the necessary paperwork falls to the lead Paramedic and as such they must be made aware of this.

The same processes used to establish contacts within an ambulance service can be utilised to expand into other areas of healthcare such as helicopter emergency medical services (HEMS) or lifeboat services. It is important to note that many organisations aren't as accommodating of students due to the nature of the service they provide, but these contacts may prove particularly useful in other aspects of the PCP such as talks and training events.

There are a number of considerations that are necessary from the point of view of the PCP's host university in order for the programme to operate. A member of staff within the university (such as year head, firm head etc.) must be contacted and informed of the programme. In the instance of KCL PCP, the year head referred the PCP to the KCL board of education in order to acquire approval. This is an important consideration when operating a scheme that places university students in potentially dangerous situations.

Bart's pre-hospital care programme

The Pre-hospital Care Programme at Bart's relies completely on the strong relationships that have been formed with individuals from London Ambulance Service, London's Air Ambulance (LAA), the medical school and other organisations. The programme could not exist without the support of the individuals and the hard work that has gone into gaining this support.

Forming a relationship with an LAS Paramedic was how the programme at Bart's was initiated and this still forms the foundation of the programme. We have a Lead Paramedic, who is responsible for recruiting Paramedics to be involved with the programme and marrying up students with mentors each year. We currently have around 30 LAS Paramedics who mentor our students. It's mostly through word of mouth that other Paramedic mentors have become involved in the programme. When we are out on shift we try to tell as many Paramedics as possible about the programme in the hope that they will want to be involved. There is a constant turnover of mentors with people leaving the LAS or deciding to change their role within the organisation so it's important that we recruit new Paramedics to the mentorship scheme each year.

Our relationship with London's Air Ambulance began with support from one Consultant but now, although not officially involved with the programme, we have the support of many LAA and emergency department Consultants who are very kind in offering their time to help us. We are trying to establish a better relationship with the LAA registrars who are keen to assist us with teaching and academic forums. This is challenging due to the temporary nature of their position within LAA but we hope to develop better communications this year so that we can utilise their expertise.

We have an official link with the medical school through a member of staff in the Institute of Health Sciences Education at Queen Mary University. This means that the programme is recognised as part of our medical school education. We can choose to submit work from our shifts with the PCP mentors as a student selected component of the course in years two, four and five. This is something that not all PCPs operate but I think, once a relationship is established with a willing pre-hospital organisation, this is a vital component of a PCP programme. Particularly when thinking about the programme as a stepping-stone to a future career, it's very important to have recognition of the time that students spent involved with such a programme.

More recently, we have been developing relationships with London Fire Brigade and LAS Central Operations. We met staff from these organisations during the Student Pre-hospital Conference held at Bart's this year. Individuals from both organisations were kind enough to approach us to say that they would like to offer students the opportunity to experience their respective roles in prehospital care. We have set up spreadsheets so that students can sign up for shifts as and when they are available.

I think the experience of Bart's PCP is that it requires strong relationships with particularly motivated individuals within organisations to help build a programme. It's challenging at first but the right individuals can make a lot happen if you can convince them that this is a worthy cause.

St George's University of London pre-hospital care programme

Whilst we operate observer shifts separately, we co-host our academic forums and larger events with the King's College London PCP. We have found this most beneficial in terms of increasing the range of speakers we can access and also ensuring high attendance at our forums, which in turns increases the attraction to our speakers to engage with our activities.

St George's University of London (SGUL) PCP initially approached our local station managers within London Ambulance Service to discuss setting up a programme whereby our students could organise observer shifts with LAS crews. We utilised the pre-existing connections between our clinical lead (Emergency Medicine and HEMS Consultant) and London Ambulance Service for final year medical student electives/student selected components. They were very keen to set up a working partnership and organise these shifts for us. We organised a face-to-face meeting to discuss the requirements of both parties and how this could be achieved. We offered that our students may be able to help with any audit/training requirements that they may have - which was received positively.

We also approached Surrey Fire and Rescue Service (SFRS) to discuss setting up a training day for road traffic collision extrication. Our contacts there were very keen to accommodate our students. As our events are held on weekends this provides their retained (part-time) crews with a simulated medical team to work alongside during their revalidation on road traffic collision extrication and feedback has been that they find this most useful.

Arguably the most important element to a successful PCP is having a keen and

dedicated Clinical Lead. We are fortunate that we have an Emergency Medicine and HEMS Consultant as our lead tutor. He has extensive experience and contacts within the pre-hospital environment and as such is able to help enormously with getting speakers for the forums and trainers for our events.

University College London pre-hospital care programme

The most important element in the creation of the University College London (UCL) pre-hospital care programme was establishing communication with those individuals who had the ability, experience and authority to initiate our programme. These individuals fell into three categories; with our local ambulance service (LAS), with our medical school education directive and with a local Consultant.

Concerning the LAS, we contacted a lead Paramedic from a local PCP and enquired if he had any contacts who may be willing to adopt a similar role within UCL. Following introduction to this contact, we formed a partnership and gained their commitment to become the programme's Paramedic lead. In addition, we contacted a senior clinician within the LAS who had links with a different PCP, and she was able to offer us invaluable advice as to how to create our brand new programme.

With the LAS links established, we contacted a local Consultant with an interest in pre-hospital care, and presented our proposal. Satisfied with the thought and work that we had put into our proposal, the Consultant agreed to lead the programme from an academic point of view.

We now had the necessary leads and blue-print for our programme, and it was with this watertight plan that we contacted the medical school Dean as it was this individual who had the ability to commission our new programme, which she did.

Since our inauguration, we have established a relationship with Wembley National Stadium and the London Fire Brigade (LFB). This, as with out LAS connection, came about by virtue of existing contacts and their willingness to introduce us to their own pre-hospital care providers.

We feel the key to building the training relationships we enjoy is to establish which individuals have the ability to help us find the right contacts for our programme, and to also ensure individuals are contacted who have the ability to ensure the programme's success. It is by doing this that we have ensured our place at UCL.

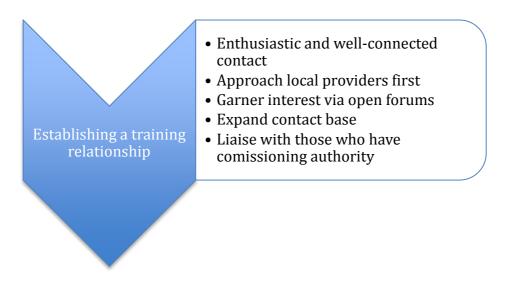


Figure 1: Summary - Establishing a training relationship

2) Maintaining provider relationships

Kings College London pre-hospital care programme

Once contacts are established, it is crucial to maintain them in order to best utilise them within a pre-hospital care programme. This maintenance of contacts can prove challenging, particularly when managing larger groups of individuals such as Paramedic mentors.

In order to keep mentors involved in the programme, it is important to keep regular contact. This can simply be a case of checking up on mentors every few months to ensure everything is running smoothly on their side of the programme, but it is also advisable to maintain further contact. This could take the form of a regular programme newsletter (applicable to both students and mentors), which contains information, both about the progress of the PCP and news about pre-hospital care more generally. The role of this (which again is applicable both to students and Paramedics) is to help them feel included in the scheme. However the importance of this should not be overlooked; it is very easy for Paramedics who don't feel involved to simply stop contacting the programme and become lost to our follow-up.

In many cases it is important to identify the preferred method of contacting Paramedics. This is important with regards to the organisational structure of the PCP – for example many Paramedics do not get time to check their work email while at their ambulance station, and as such will not be able to receive or reply to emails sent to this address. As such, we have found many Paramedics prefer to use mobile phones as a method of contact. This, however, can lead to further issues with mentors not wishing to disclose their phone number to students whom they have not met. The most important way to alleviate these problems is to gain permission from the Paramedic and ensure they are happy with the communication arrangement, and if they are unhappy or unresponsive, to contact the lead Paramedic and discuss how to improve the situation.

It is possible, depending on the methods of funding the scheme, to provide incentives for contacts to become - and remain - a part of the scheme. In many cases teaching is an important component to a professional CV and as such the opportunity to train a student can be used as an incentive in itself. However in some cases financial incentives can be provided to encourage Paramedics and other healthcare professionals to participate in the scheme.

Bart's pre-hospital care programme

Given that most of the people involved in the pre-hospital care programme at Bart's do so completely voluntarily, it's important to maintain and respect the relationships with these individuals. This is challenging and requires forethought. I think we have been guilty of neglecting these relationships in the past and, as a result, have lost some links. There are two issues that arise in maintaining contacts within the programme. The first is that contacting large groups of people (mentors) and the second is giving due time and consideration to communication from individuals. We have been trying to tackle these issues this year.

It's been difficult at times to establish a consistent means of maintaining contact with mentors. We found that many of the mentors did not use emails very often or we had old email details for them. The best way to contact them is via mobile phone but this is difficult when trying to send a bit group message. This year we set up a Facebook group for mentors only. We found that this seemed to be the mode of contact that most mentors used so thought it would be a good medium for a group message or discussion. Although not ideal for official business, it's certainly worked well in allowing us to involve mentors in events and get some feedback about the programme.

This year we have appointed someone to specifically act as a liaison with LAS, LFB, Central Operations and any other external organisations we get involved with. When these individuals are putting in so much effort to help our students, we felt that it was only right to give their correspondence the attention it deserved and make sure that we fully utilise the opportunities they offer us. By specifically allocating a student to this role, we hope that we will be able to develop these relationships further and make them more symbiotic.

We like to invite mentors along to academic and social events. Although there are usually only a small number who are able to join us due to shift patterns, it's a brilliant opportunity for the mentors to see what they are a part of and meet some of the other students and staff involved.

St George's University of London pre-hospital care programme

We have found that the most effective way to maintain the links is to involve the Paramedics and Fire Service in our academic programme both as attendees and as lecturers/trainers.

Our lead contact at LAS is a training officer and we inform her of all of our events in order that she can advertise to her trainees (whether Paramedics or not) and allow them to attend. All of the Paramedics that attend/teach are provided with certificates for their portfolios and feedback from the Paramedics that attend our events is that they find them highly educational in terms of their clinical knowledge, but also in increasing understanding of the role of the HEMS/prehospital medics. This help to further improve their team working on scene when they attend the same jobs.

We also extend the invitation to our events to members of Surrey Fire and Rescue Service (SFRS) to allow them to develop their medical knowledge should they be interested. Our key contacts at SFRS deliver the road traffic collision extrication and trauma management courses and they regularly attend our events as it assists them in their role within the fire service.

University College London pre-hospital care programme

At UCL, we hope to maintain our provider relationships by demonstrating a recognition of their time and expertise.

The most tangible way by which we do this is through provider payment via the SIFT pathway. Thus, we pay the LAS the standard London NHS trust tariff for the time they host our students. This currently amounts to around £15,000 per annum, and is possible as we run as a series of medical school curriculum student selected components.

However, we are aware that this payment will not directly reach our Paramedic mentors. Thus, we offer our mentors certificates of recognition for their contribution to our students' learning. Mentors put these certificates towards their portfolio, which is then used for career progression.

We also try and engage our mentors and other LAS/LFB contacts by inviting them to our monthly open forums both as participants and as speakers. We hope this demonstrates a respect for their expertise and also a desire to include them in our wider work. This collaboration and shared learning goes some way to maintaining a fruitful and mutually beneficial relationship.

Equally, we engage our providers in our quality assurance process. This also helps demonstrate a respect for their expertise as they directly contribute to the educational intervention we are running. Equally, engagement in this way helps ensure our providers are happy with the programme and so are more motivated to continue to engage with our students.

Finally, by running as SSCs we are able to demand a certain level of attainment from our students. This translates to reliable, motivated and keen students who represent themselves and our programme well, and who thus engage our providers in a meaningful way. Our providers recognise the calibre of our students and are thus equally motivated to maintain the relationship as engaging with our students is not seen as a chore.

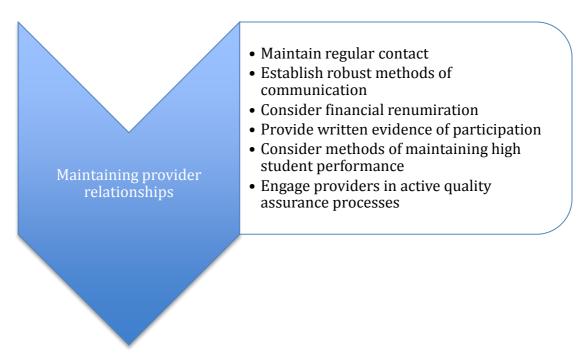


Figure 2: Summary - Maintaining provider relationships

3) Encouraging inter-disciplinary work

Kings College London pre-hospital care programme

The importance of interdisciplinary practice is increasingly acknowledged, and this is therefore an important consideration in running a pre-hospital care programme. Interdisciplinary practice is necessary for a PCP to operate, as the cornerstone of these schemes in medical or nursing schools involves working with a Paramedic mentor.

If from an early stage one encourages students of different disciplines to work and train together, interdisciplinary working becomes a norm that can persist throughout the career of those involved. At KCL, which comprises both a medical and a nursing school, practical training events and moulages are often run with both nursing and medical students collaborating at different stages of their education. One benefit of exposing students to interdisciplinary practice is that it allows students to develop respect for other professions. In these cases, the nursing students have a well-developed skillset with regard to the practical aspects of the training scenarios, while medical students have a more in-depth understanding of the underlying processes and pathologies involved. Students can learn from each other on occasions such as these to further their own education, while supporting the education of their colleagues.

With respect to ambulance shifts, the situation is similar. While these ambulance shifts are primarily a training experience for the medical student, Paramedics are often enthusiastic to learn more about the conditions they are managing and the logic behind the protocols that they follow. By learning from the observing medical students, Paramedics are able to contextualise their practice. Hence the PCP can be a formative experience both for the students and the Paramedics.

Similarly, students on placements can compare the practices that they see in the hospital environment with those that occur in the pre-hospital arena and learn more about how pre-hospital and hospital staff interact. At KCL we encourage students to become involved in the handover process both on ambulance shifts and A&E placements, allowing students to develop an idea of what is required for an effective handover and how Doctors, Nurses and Paramedics handle the presented information differently. This helps students to gain an idea of how interdisciplinary practice works currently and how it can be improved.

Bart's pre-hospital care programme

Our monthly academic forums provide a great opportunity for students to experience an inter-disciplinary approach to pre-hospital medicine. These are open forums and so anyone is welcome. The audience usually consists of medical students, paramedic students, paramedics and doctors from a number of different specialties. It's incredibly beneficial for students to hear the opinions and expertise of their paramedic colleagues in the audience. It invites students to consider both their role and the role of others in a multi-disciplinary team. This is undoubtedly a transferrable skill and will serve them well throughout their career.

Our hope is that, through our more recent relationship with London Fire Brigade, we will be able to increase the number of professions that students consider to be part of the pre-hospital team. In London we are lucky to have a number of services such as the RNLI and Metropolitan Police who have specialist services to assist with patient care and I'm sure we would benefit from forging relationships with these organisations. Further afield there are organisations such as mountain rescue teams who provide a rich source of expertise for anyone wanting to make that contact.

St George's University of London pre-hospital care programme

At St George's we are highly fortunate to have a Paramedic Science course which allows us to work extensively with paramedic students at all of our events. This also gives us greater access to Paramedics who are keen to help with the delivery of our academic programme and have non-paramedic students accompany them on shifts.

All of our academic forums and events are open to the entire student cohort of SGUL and this encourages any student with an interest in pre-hospital or trauma medicine to attend and participate fully. Our membership includes medical, paramedic, nursing, physiotherapy, biomedical and healthcare students. This ensures that we all become very accustomed to working with each other from the start of our respective training.

This structure also gives us access to a wider range of speakers, trainers and facilitators and is one of the elements that our students like most about our programme. Having the connection to the Paramedic Course has allowed us to contact the College of Paramedics about any support that they might be able to offer us.

University College London pre-hospital care programme

Our primary source of inter-disciplinary working is the essence of our programme; our observer shifts with LAS Paramedic mentors. Beyond this, we

host open forums which are advertised to our Paramedic, Nurse and Doctor colleagues as well as within the medical school.

We have links with the LAS clinical audit office through which students may engage with senior LAS clinicians and managers, complete quality improvement work and thus learn about the wider clinical and managerial team. Students find this a useful experience as it helps them to appreciate the wider context of the activities of their core shadowing shifts.

We are fortunate to have links a relationship with the LFB and it is with these individuals that some of our students also train, often being simulated patients during moulage exercises. In so doing, our students feel actively useful during the moulage exercise and are thus motivated to engage with the exercise and return again.

Finally, we have links to Canterbury Christ Church Paramedic College, and we often share our events with our paramedic student colleagues. Students are motivated to share events as they understand the beneficial potential of the collaborative learning, with paramedic students often able to teach medical students about the human factors and medical students often able to discuss more core science and pathology. We have found these sessions particularly useful at encouraging inter-disciplinary learning as it is clear both parties gain from the experience.

Throughout our inter-disciplinary activities – particularly those with our paramedic student colleagues – we evaluate our students' response and learning. By doing this, we are able to share the consistently positive feedback so education commissioners can see the benefits of this work, hopefully conferring increased funding and support for similar interventions into the future.

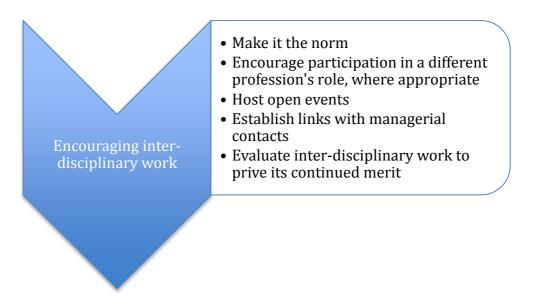


Figure 3: Summary – Encouraging inter-disciplinary work

4) Maintaining programme longevity

Kings College London pre-hospital care programme

The crucial component of maintaining a sustainable pre-hospital care programme is ensuring maintenance of channels of communication within the programme. As described earlier, maintaining our Paramedic mentors into the future is absolutely necessary; however it is inevitable that as Paramedics are very mobile, there will be mentors leaving the programme on occasions. As such it is advisable to continue establishing new contacts in order to compensate for any losses to the programme. This will ensure that there are enough mentors at any one time to keep students participating in shifts.

As PCPs are student-led there will also be a rapid turnover of students in charge of the programme. This must be accounted for and an effective handover prepared such that subsequent committee members and student directors are in a position to take over the programme and ensure seamless transition into the new academic year. At KCL PCP, all students who participate in the management of the programme are required to have been involved in the mentor scheme for at least one year. They therefore already have an understanding of how the programme is managed before taking on the responsibility of running it, while also having demonstrated an interest in the programme and have met some of the society's contacts through their experiences of the programme. This puts students in a much better position to take on a management role.

In addition to the above, the production of a compilation of all the necessary information required to run a PCP scheme that can easily be passed on to subsequent PCP directors allows for efficient turnover. In particular information such as a contact list and a folder containing all the necessary forms, documents, certificates and other digital information provides support for students new to the management of the scheme.

Bart's pre-hospital care programme

As a well-established programme, the Bart's PCP functions well and has a good structure. However, we are now at a point where we feel development and innovation need to begin again. These programmes take a lot of hard work to set up and maintain so the temptation can be to hold back from pushing it further than it's foundations. Pre-hospital care is developing so quickly as a speciality and it's important that these programmes develop too. We have identified a number of key areas that we would like to develop in the next few years to ensure that the programme moves forward and remains sustainable.

Traditionally the PCP committee at Bart's has consisted of 4th year students on the programme who are inevitably less involved in their 5th year and then leave the programme. We felt that this was part of reason the programme was unable to progress each year. In order to allow projects to develop properly and come to fruition, it is important to have some cross over in the committee and have committee members who will be able to see them through. There is also a long period of adjustment each year when the committee hands over to a completely new group of people. This year we have introduced the first committee made up of students years 3 and 4, which we hope will lead to more effective use of committee time.

Given that pre-hospital care is a very broad field, encompassing so many different organisations, we felt that our programme should reflect this. We now offer students the opportunity to carry out shifts with a number of different agencies and in the Emergency Department. We hope that this will make the programme less reliant on Paramedic mentors to accommodate all out students for the whole year. It made also lead to us being able to increase the capacity of the programme.

To make a PCP sustainable it's vital to have a solid and effective technological foundation. We have recently made a lot of changes to our email system, website, mailing list and social media. This takes a lot of time but it's worth setting this up properly so that everything then runs efficiently. In particular, a good email system and mailing make the day-to-day administration of the programme so much easier.

Our evaluation and assessment throughout the programme by medical school staff means that the PCP is not just an extra-curricular activity but also a recognised part of our medical training. Without this support the PCP would be a much more fragile entity in the future. With the backing of the medical school we feel able to confidently develop new ideas and build the programme within safe and official bounds.

St George's University of London pre-hospital care programme

One of the key elements that will ensure the longevity of the PCP at SGUL is the strength of the committee in terms of dedication and team working. Each member has a distinct role and work together under the co-ordination of the president. We also encourage the committee members to come from different courses within our university to ensure that everyone's thoughts and needs can be adequately met. We have a 'young' committee and are constantly lining people up from first and second year to succeed our outgoing members. We have a long handover period between the existing and new committee members to ensure that prior to the end of the academic year we have several events planned for October and November, which serve to attract new recruits.

We are also entirely self-funded and use the funds generated by event ticket sales to purchase equipment and improve the overall quality of our training offering. By offering high calibre events, we attract students from freshers' fayre until they graduate.

Whilst we have slightly changed the look of our programme over the last 12 months, we are confident that the PCP at St George's will continue to expand,

progress and evolve. We are keen to set up a dedicated formal programme in which a select number of students will have the opportunity to have an allocated Paramedic mentor with whom they work over the course of an academic year.

We are also able to offer research student selected components to our medical students though our clinical tutor and LAS. Last year all of our students who pursued student selected components presented posters at international conferences and many were published in major journals. This in itself proves to be a major attraction to the programme and encourages students to regularly attend our events.

University College London pre-hospital care programme

Throughout our planning and delivery, we hope to have secured a permanent and meaningful place within the medical school, and a long-lasting and strong relationship with our stakeholders.

Concerning the medical school, we hope to prove that our programme adds value to a medical student's training whilst harnessing core and recognised values of the modern day Doctor. We hope to prove that students leave our programme with a greater appreciation of teamwork, inter-disciplinary respect, communication skills and what it means to be a patient on a journey through the health care system. We hope to prove this through our in-house evaluation, the results of which are sent to the medical school at the end of each academic year.

By taking only a modest six students per each of our three programme years, we hope that we were able to efficiently direct our attentions and resources so as to offer best educational value. As this was the first year running the extended three year programme, we did not want to overstretch ourselves and then not deliver. So, we were deliberately conservative in our student intake. We hope that this strategy will serve us well as we are able to prove our worth as a programme before expanding our numbers.

We have a very comprehensive evaluation strategy that includes feedback from both our students and our providers. This covers both the practical aspects of the programme's activities, but also a more considered appreciation of our wider programme offering. We hope that this rigour will help us to continue improving, and to continue to alter our programme to meet the dynamic and changing needs of our students and training partners.

We feel we have developed a leadership structure which confers longevity. Student committee members, should they wish to remain a part of the programme, are able to progress through the leadership structure up to the level they desire. This is a great motivator for our committee. It also ensures that the programme does not rely solely on the impetus of one individual – instead that of a whole committee and new student lead each year.

We hope that by offering our providers financial payment for their services, this helps our providers remain keen to participate in the programme. Their

involvement is key to the existence of our programme. We feel, also, that financial reward goes some way to demonstrate the value we place on their services; for example, per student contact hour, the LAS receive the same tariff from UCL as a NHS foundation trust hospital. This demonstration of value, we hope, confers our trust and respect in the quality of the providing organisation, and it is this feeling of worth which helps ensure continued commitment.

Finally, a dedicated and enthusiastic Consultant and Paramedic lead are paramount to our longevity as it is often these individuals who have influence and experience. We are very lucky to have two such individuals on our team, and we believe they will help ensures this programme's long-term existence.

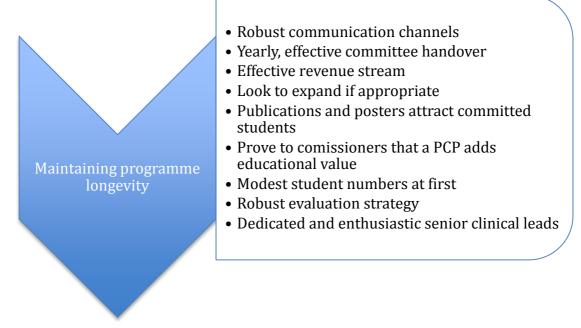


Figure 4: Summary – Maintaining programme longevity

Student questionnaire

<u>Aims</u>

We created an anonymous student questionnaire that was distributed to students undertaking pre-hospital care programmes within London.

The aims were to evaluate the usefulness of the students' pre-hospital care experiences, and to elicit the areas of the students' medical education which are most benefitted by this exposure.

Methods

An anonymous survey was created via googledocs. This contained a mixture of quantitative and blank space qualitative questions. The survey was electronically distributed via local pre-hospital care programme leads to their respective student cohort.

Analysis

Results were initially collected onto a googledoc programme. These were then translated onto an excel spreadsheet where they were analysed using descriptive techniques.

<u>Results</u>

Demographics

Nineteen students completed the survey. Of these, the largest minority (7, 37%) were first year Medical students. Second year Medical students accounted for the second largest cohort (5, 26%), third year Medical students accounted for 3 (16%) participants, and one fourth and one fifth year Medical student also participated. Two first year Paramedic students (11%) also participated in the questionnaire.

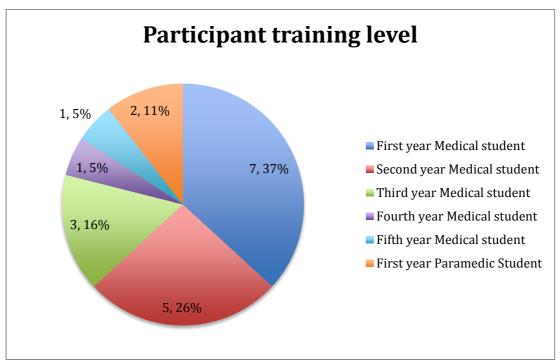


Figure 5: Participant training level

Of those surveyed, the majority of students (10, 53%) had their own Paramedic mentor (figure 6). Of these 10, two (20%) were Paramedic students.

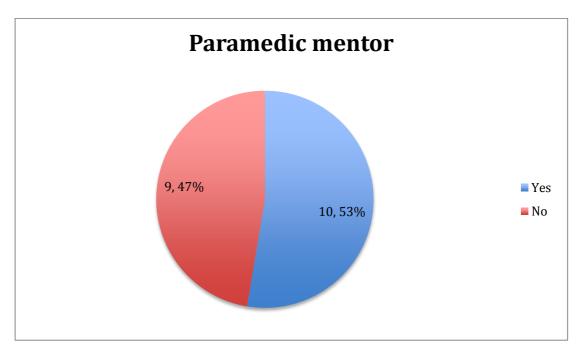


Figure 6: Paramedic mentor relationship

On average, students completed 2.3 observer shifts per month (range 1-10).

Expectations

In order to contextualise the participants' responses, we asked students to describe their experiences and expectations of work with local pre-hospital care services.

Students commented that often, ambulance services attend patients who "cannot get a GP appointment", and who are not necessarily acutely unwell. One student commented that the pre-hospital patients encountered are often "patients who...do not actually require emergency medical care and should instead visit their GP or arrange for their own transport to hospital". Students commented that often these are often "elderly patients" with "exacerbations of chronic conditions". Equally, students commented on "drunk" patients and patients with "mental health" problems as the typical population served by ambulance services. Students consistently commented on there being a "wide range" of patient presentations. It was uncommon for students to mention trauma or cardiac arrest patients as typical of the pre-hospital patient population.

Educational benefit

Students were asked a series of ranking questions where 1 equalled 'not at all' and 10 equalled 'extremely'.

The first series of questions related to the educational benefit a student garners from undertaking observer shifts. Responses were consistently high, and averages are shown in figure 7.

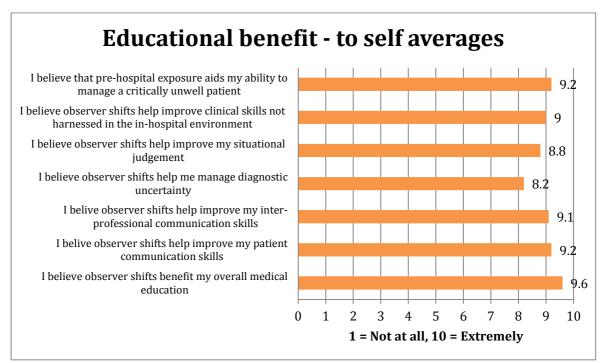


Figure 7: Educational benefit, quantitative result averages

Students were also asked a series of questions surrounding the perceived benefit to the wider pre-hospital care team of their presence during observer shifts (figure 8). Results were consistently high however slightly less so than those results for the questions surrounding the benefit to a student's education.

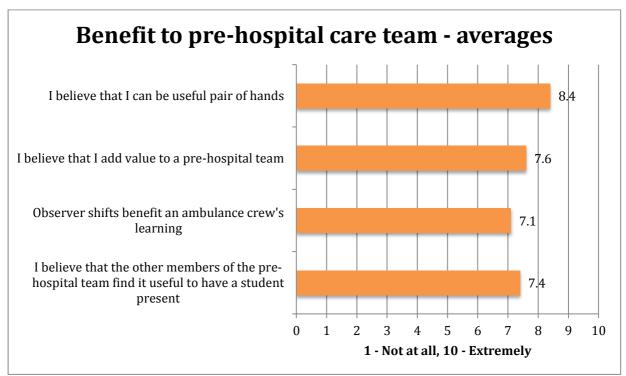


Figure 8: Benefit to pre-hospital care team, quantitative result average

Qualitative results

Participants were asked via white space questions to state those aspects of observer shifts they find most beneficial.

Students consistently stated that there was tremendous benefit in "improving communication skills" through communicating with "real people" in "multiple and varying situations" – both patients and "other health professionals".

Students also stated that their pre-hospital exposure broadened their appreciation of the team around them, specifically the skill in "creating a differential diagnosis" in the pre-hospital environment with limited resources. It also highlighted what the wider medical team "are cable of" - particularly concerning the pre-hospital interventions prior to arriving at an emergency department.

Many survey participants also commented that pre-hospital care opportunities offer wide-ranging clinical exposure. Students stated that their pre-hospital experiences exposed them to "events which you rarely otherwise see and therefore do not know how to manage". Another student echoed this sentiment, saying that pre-hospital care offers "exposure that [they] would otherwise have no opportunity of receiving", and indeed there is a benefit in being able "to see

many different patients and get a long time to spend with each, and see how there care progresses from arrival to finishing the case". This appreciation of the 'patient journey' was echoed in one student saying that their pre-hospital activities confer a "chance to see what happens to a patients before they arrive at the hospital". One student commented that pre-hospital exposure "consolidates" knowledge learnt during other parts of the medical school curriculum – a feeling echoed by another student who said "it puts the scientific things we learn in lectures into practical use and this is an very important experience because it puts the learning into perspective".

Finally, students were asked how their pre-hospital experience could be improved. The overwhelming sentiment was one of fulfilment, however students repeatedly commented that "more shifts" would be useful and indeed "adding the pre-hospital care programme to the medical school curriculum" would be an overall benefit to all medical students.

Comment

The results of this survey demonstrate consistency with the results elicited from similar student evaluations.

It is particularly pleasing that the expectations of the participating students are managed. Whilst it is true that the participants are a self-selecting group who understand the work of pre-hospital services, the fact remains that they are well aware of the reality of patient cohort; often chronic, generally well patients with presentations not necessarily requiring of an emergency ambulance. This is in contrast to the image portrayed elsewhere of relentless trauma, cardiac arrests and other blue-light calls.

It is very clear that students confer tremendous benefit through their prehospital exposure – which in London is largely centred around the London Ambulance Service. This is seen through the consistently high average scores in the quantitative questionnaires. Students describe a benefit to their overall medical education, but they also demonstrate an appreciation of the patient journey, inter-disciplinary teamwork and communication; all of which are very topical learning objectives about which medical schools are obliged to teach medical students. Currently, this teaching often occurs in somewhat dry, sterile 'small group' environments. However, our data demonstrates that the prehospital field is an area in which this learning can also be facilitated.

Equally, students feel that they are more than just passive observers whilst on shift. Whilst in their capacity they are not clinically involved with patients, students nevertheless feel they contribute to the team and that other team members gain something from their presence. It would be useful to explore this subject further as with further elucidation, it may be possible to use this sentiment as motivation for future ambulance service – medical school collaborations.

It is regretful that we were not better able to target healthcare students from other professions. It would have been particularly interesting, for example, to have nursing students' views as they too work at the pre-hospital – hospital interface. In future, our working group should try to better engage with other healthcare students.

Overall, students feel that their pre-hospital exposure compliments their learning from other parts of their degree course. They feel that pre-hospital opportunities should be encouraged and instigated where they are currently not.

Conclusion

There is considerable undergraduate interest in pre-hospital care. London is very fortunate to have established, supported student pre-hospital care programmes over recent years. It is true that London medical schools enjoy hospitable ambulance services, fire brigades and other providers all of whom are used to hosting interested students.

We believe that student engagement with pre-hospital care confers considerable educational benefit. We hope that our data demonstrates this and provides motivation to those involved in developing and commissioning educational interventions to pursue this field of medicine.

We hope too to have highlighted steps by which successful and lasting prehospital care programmes can be created. We believe that when done in an appropriate, considered manner, a sustainable pre-hospital care programme can act as the gold standard for educating the modern-day Doctor.

