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journal homepage: <http://www.airmedicaljournal.com/>

## Original Research

## Mapping the Patient and Family Liaison Role in UK Helicopter Emergency Medical Services: A Service Evaluation

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## A B S T R A C T

**Objective:** Patient and family liaison practitioners are a relatively recent addition to UK helicopter emergency medical services to support patients with their recovery. A service evaluation was completed that mapped the current provision of patient and family liaison practitioner roles in helicopter emergency medical services in the United Kingdom.

**Methods:** An online survey was distributed to key stakeholders involved with UK helicopter emergency medical service patient and family liaison practitioner roles. Quantitative survey results were described, and open-ended questions were analyzed using content analysis.

**Results:** Twenty UK helicopter emergency medical services responded to the survey. Nine of these services employ patient and family liaison practitioners with 4 additional helicopter emergency medical services planning to initiate the role. There is variation in the employment models used between the services. The patient and family liaison practitioner role provides important benefits to patients and their families, clinicians, and the helicopter emergency medical service.

**Conclusion:** Nine UK helicopter emergency medical services employ patient and family liaison practitioners. This role benefits patients, their families, helicopter emergency medical service clinicians, and helicopter emergency medical service charities. Further research is required to understand how the role works in practice and to understand how to maximize the benefits to stakeholders.

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In the United Kingdom, there are 21 helicopter emergency medical services (HEMS) charities and not-for-profit organizations and 1 National Health Service–funded air ambulance service (Table 1) in the United Kingdom. UK HEMS charities on average collectively complete 25,000 missions a year.<sup>23</sup> UK HEMS can provide both air and ground transport and are often staffed with a doctor and a specialist practitioner in critical care. UK HEMS provide critical care treatment for patients with time-critical conditions, and these patients are often conveyed to major trauma centers.<sup>24</sup> Patients who are attended by UK HEMS often have significant psychological and physical challenges as a result of their injuries or illness,<sup>25</sup> and conveyance to a

facility distant from home comes with additional challenges for patients and their families. In recent years, a new role of patient family liaison practitioners (PFLPs) has evolved to further support patients who have been attended by UK HEMS. PFLPs have been a relatively recent addition to some UK HEMS, with the first appointment of such a role being in London Air Ambulance Service in 2013.<sup>25,26</sup>

The role of the PFLPs is to support patients treated by HEMS with their long-term recovery. PFLPs aim to bridge the gap from the often traumatic scene of injury or illness, supporting patients during their recovery in hospital and beyond hospital discharge.<sup>25,26</sup> The PFLP role is broad; patients often have no recollection of being treated at the scene by HEMS, and if patients wish, the scene and clinical treatments administered by HEMS can be sensitively explained. PFLPs can refer patients for appropriate rehabilitation and link patients to new and ongoing peer support networks.<sup>27</sup> PFLPs follow up patients who

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**Table 1**  
UK Helicopter Emergency Medical Services (HEMS) Funding and Resources

Country	Funding	Resources
England		
Cornwall Air Ambulance <sup>1</sup>	Charity	1 × HEMS 2 × RRVs
The Air Ambulance Service <sup>2</sup>	Charity	2 × HEMS RRVs
Devon Air Ambulance <sup>3</sup>	Charity	2 × HEMS 2 × RRVs
Dorset and Somerset Air Ambulance <sup>4</sup>	Charity	1 × HEMS 2 × RRVs
East Anglian Air Ambulance <sup>5</sup>	Charity	2 × HEMS 2 × RRVs
Essex and Herts Air Ambulance <sup>6</sup>	Charity	2 × HEMS 4 × RRVs
Great North Air Ambulance <sup>7</sup>	Charity	3 × HEMS 2 × RRVs
Great Western Air Ambulance <sup>8</sup>	Charity	1 × HEMS 2 × RRVs
Hampshire and Isle of Wight Air Ambulance <sup>9</sup>	Charity	1 × HEMS 3 × RRVs
Air Ambulance Kent Surrey Sussex <sup>10</sup>	Charity	3 × HEMS 4 × RRVs
Lincolnshire and Nottinghamshire Air Ambulance <sup>11</sup>	Charity	1 × HEMS 2 × RRVs
London's Air Ambulance <sup>12</sup>	Charity	2 × HEMS 5 × RRVs
Magpas Air Ambulance <sup>13</sup>	Charity	1 × HEMS RRVs
Midlands Air Ambulance <sup>14</sup>	Charity	3 × HEMS 2 × RRVs
North West Air Ambulance <sup>15</sup>	Charity	3 × HEMS 4 × RRVs
Thames Valley Air Ambulance <sup>16</sup>	Charity	1 × HEMS 4 × RRVs
Wiltshire Air Ambulance <sup>17</sup>	Charity	1 × HEMS 2 × RRVs
Yorkshire Air Ambulance <sup>18</sup>	Charity	2 × HEMS
Wales		
Wales Air Ambulance <sup>19</sup>	Charity	4 × operational HEMS 3 × 12 h/d service 1 × 24 h/d service
Scotland		
Scotland's Charity Air Ambulance <sup>20</sup>	National Health Service	2 × HEMS 2 × fixed wing aircraft
Scottish Air Ambulance <sup>21</sup>	Charity	2 × HEMS 2 × RRVs
Northern Ireland		
Air Ambulance Northern Ireland <sup>22</sup>	Charity	1 × operational HEMS

RRVs = rapid response vehicles.

have been attended by HEMS and where appropriate visit patients and build a relationship to support those patients and their family through the pathway of recovery.

The PFLP role in UK HEMS is evolving, and now is an ideal time to evaluate how the role is being implemented nationally. Before this can occur, there needs to be some understanding of how many UK HEMS have implemented the PFLP role in practice. A service evaluation was completed using a survey that aimed to map the current provision of PFLP roles in UK HEMS.

## Methods

The UK HEMS PFLP provision was mapped using an online survey. The online survey questions are detailed in Table 2. Key stakeholders in UK HEMS were contacted and asked to participate through existing social media channels and via Air Ambulance UK. In addition, existing UK HEMS networks of PFLPs and prehospital research networks were contacted to assist with survey distribution to any relevant

**Table 2**  
Online Survey Questions

	Survey Question
1	Which air ambulance are you responding on behalf of? Drop-down list
2	Does the service currently employ practitioners in a patient and family liaison role? Yes (if yes go to question 4) No (if no go to question 3) Comment box
3	Does the service have any plans to introduce patient and family liaison practitioners? Yes No Do not know Comments End of survey
4	When did the service introduce the patient and family liaison practitioner role? Free text
5	How many patient and family liaison practitioners does the service employ? Free text
6	What is the clinical background of the patient and family liaison practitioners in your service? Paramedic Nurse Other—free text
7	How are patient and family liaison practitioners employed in your service? Full time Part time Mixed role e.g., clinical/patient and family liaison practitioner Other – free text
8	Please can you briefly describe the role of the patient and family liaison practitioner in your service? Free text
9	Please can you briefly describe what you perceive to be the benefits of the patient and family liaison practitioner role? Free text
10	Are there any other comments you would like to make regarding the patient and family liaison role? Free text End of survey

stakeholders. The survey was distributed between May and July 2021. Quantitative survey results were described and answers to 2 open-ended questions were analyzed in NVivo (QSR International Pty Ltd, Burlington, MA) using content analysis.<sup>28</sup> Themes were identified and agreed on without the need for arbitration between 2 researchers (K.K. and R.C.). The results were circulated to respondents and a professional network of PFLPs to check for agreement and accuracy. No changes were made after feedback from this network.

## Results

In total, there were 35 responses to the survey representing 20 UK HEMS for a 95% response rate. All services were represented by 1 respondent, except for Devon Air Ambulance (2 respondents), Great Western Air Ambulance (4 respondents, PFLP model not employed in this service), and Air Ambulance Kent Surrey Sussex (2 respondents, PFLP model not employed in this service). Nine HEMS have practitioners employed in the patient and family liaison role. One HEMS does not have the PFLP role but offers support via a “Patient and Relative Hub.” Four HEMS have plans to introduce the PFLP role in the near future. The length of time in the role, clinical backgrounds, and service provision of the current models are provided in Table 3.

### Content Analysis of Open-Ended Questions

#### The PFLP Role

Content analysis of the respondents' description of the PFLP role identified 3 themes (Fig. 1): obtaining clinical feedback for crews,

**Table 3**  
Patient and Family Liaison Practitioner (PFLP) Employment Models

HEMS	Year Introduced	Number Employed	Clinical Background	Employment Model
London	2013	1	Nurse	1 × FT
East Anglia	2016	4	Nurse	4 × PT
Thames Valley	2018	3	Paramedic	1 × FT, 2 × PT (employed by the charity but based in HEMS, community, and major trauma center)
Devon	2019	3	Paramedic	Mixed role: clinical/PFLP
Dorset & Somerset	2018	2	Critical Care Nurse	PT/mixed role: clinical/PFLP
The Air Ambulance	2020	1	Paramedic	FT
Lincolnshire and Nottinghamshire	2020	1	Police Officer	PT
Wales	2020	1	Nurse	FT
Essex & Hertfordshire	Unknown	2	Paramedic	Mixed role: clinical/PFLP

FT = full-time; HEMS = helicopter emergency medical services; PT = part-time.

providing support for patients and their families, and positively representing the charity. The main element of the role is to provide support for patients and their families for the recovery process or bereavement. However, there was also an important aspect in supporting the operational crews with clinical feedback and providing a positive representation for the HEMS charity. One respondent defined the role as follows: “Act as a point of contact for both patients (and) families within the recovery phase assisting with background and knowledge of prehospital care. Obtain clinical feedback from hospitals and patients for crew to enable clinical learning.”

*Benefits of the PFLP Role*

Content analysis of the respondents’ description of the benefits of the PFLP role identified 3 main themes (Fig. 2): benefits for patients and their relatives, benefits for clinicians, and benefits for the service. One respondent described this as follows: “Increased support for those involved in a traumatic incident. Provides signposts towards charities and services that may help them. To gain feedback to allow our service to be at its best for all. To bridge any gaps between the crews, our patients, families and non-clinical staff. To become the face of the charity for channelling support.”

Benefits for patients and their relatives encompassed bereavement support for relatives, patient and family support regarding recovery, and information provision. Benefits for clinicians included a facilitated clinician and patient reunion and the provision of clinical feedback to aid in learning and development. The benefits for the service included the facilitation of clinical education, a positive representation of the charity, and patient family support for research activities.

**Discussion**

The results of this survey indicate that the PFLP is a new and developing role in UK HEMS with PFLP models initiated within the last 8 years and variation in employment models. Participants indicated that their view is that the PFLP role is of substantial benefit to patients, families, HEMS clinicians, and HEMS charities. This finding is in line with research concerning liaison nursing roles in intensive care units<sup>29</sup> and general practice.<sup>30</sup>

The survey results indicate variation nationally in the implementation of the PFLP role and in the different types of employment model initiated in UK HEMS. Respondents identified in the survey responses that the PELP role has been initially challenging to establish. In addition, respondents identified the need to further understand the evidence base for and the impact of the PFLP role in this complex area of care. Furthermore, there is a need to identify the most appropriate models of working to maximize the benefit to all stakeholders concerned.

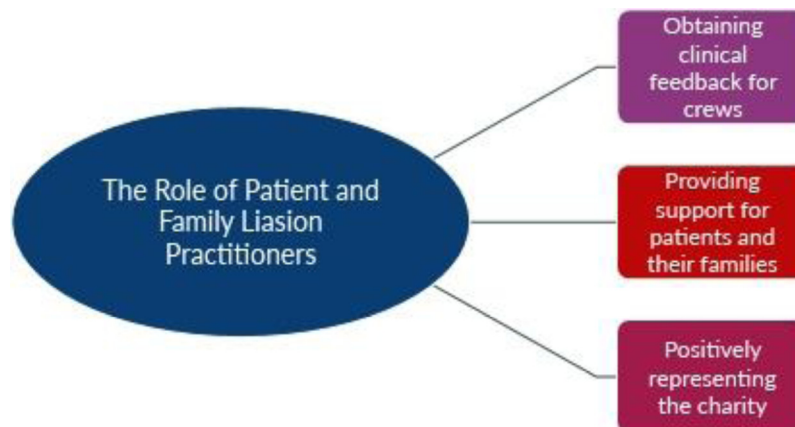
A limitation of this service evaluation is that it consisted of a small survey conducted in UK HEMS to map the provision of the PFLP role. Respondents were self-selecting, and there may have been bias in the way participants responded. Well-designed research is required to further explore this role as it develops.

*Recommendations for Further Research*

The benefits to stakeholders and the most optimal ways of working in this role are not well understood. It is important to conduct further research to better understand how to optimize the PFLP role for the benefit of patients, families, and HEMS clinicians and charities.

**Conclusion**

The PFLP role is a relatively new and expanding role introduced into a proportion of UK HEMS. HEMS use different models of



**Figure 1.** The PFLP Role.

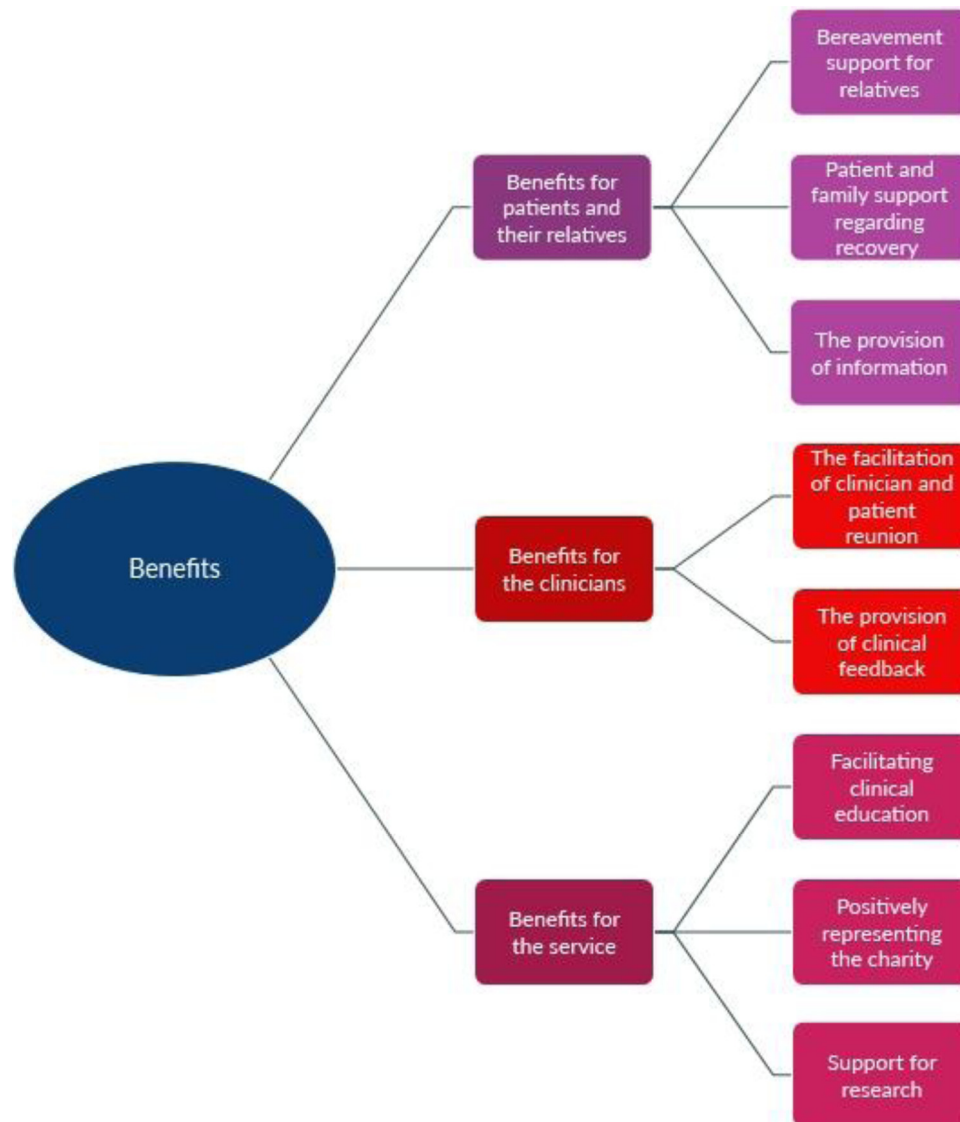


Figure 2. Benefits of the PFLP Role.

employment to include different occupational backgrounds and a variation of part-time and full-time working and mixed clinical/PFLP roles. The PFLP role is viewed by respondents as a positive addition to the HEMS team. The perceived benefits of the role are not just patient focused but also family, clinician, and service focused. The role is perceived to facilitate the provision of a holistic package of care for patients and their families attended by HEMS and allows for important clinical feedback to HEMS teams. Further research is required to understand how the PFLP role works in practice and to understand how to maximize the patient and additional stakeholder benefits from this role.

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