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Evaluation of the Emergency Medicine Leadership Programme

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Abbreviations

CoP - Community of Practice
ED - Emergency Department
EM - Emergency Medicine
EMLeaders - Emergency Medicine Leadership Programme
F2F – Face to Face
HEE - Health Education England
ELSE – Extended supervised learning events
PA - Programmed activity
RCEM - Royal College of Emergency Medicine
ROI – Return on Investment
RTD – Regional training days

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Foreword

‘Emergency Departments are at the very heart of our National Health Service’

This is a quote from the ‘Securing the Future Workforce for Emergency Departments in England’ report, published in October 2017 jointly by NHS England (NHSE), Health Education England (HEE) and the Royal College of Emergency Medicine (RCEM). The report outlined a four-year plan to address the workforce shortages in emergency departments (EDs), to ensure sustainable staffing for the future. It acknowledged the importance of developing leadership skills in Emergency Medicine (EM), by committing to investment in a national leadership programme for every emergency medicine trainee in England. The aim was to develop the skills of EM trainees by producing an innovative and tailored ‘leadership programme’, reducing training attrition and improving support for trainees in this intense and pressurised specialty.

To deliver this joint commitment, NHSE, RCEM and HEE in 2018 began the EMLeaders Programme, a four-year initiative to develop and embed leadership training within local training structures across England. Since its inception, the programme’s scope has expanded to include the multidisciplinary workforce in Emergency Medicine, recognising that everyone can benefit from leadership training.

The importance of leadership training is widely recognized, but consideration should be given as to how to ensure delivery is relevant and meaningful from the start. The EMLeaders Programme achieves this through synthesising leadership skills with context and real-life examples relevant at each stage of progression. It brings together people working in Emergency Medicine at all stages of their careers, enabling learning from shared experience of leadership. The programme provides an assortment of ways to access varied levels of leadership training including E-Learning modules, face to face training and communities of practice.

This report outlines findings and recommendations that can provide the basis and justification for the future direction of leadership training in EM. This will continue to facilitate the development of staff leadership, work to reduce attrition, support well-being and assist career progression in one of the most intense healthcare environments in the NHS. As the NHS works to recover from incredible pressure caused by the pandemic, providing support for and enabling leadership skills, knowledge and behaviours in staff has never been more imperative.

We thank HEE for their financial commitment and contributions and the Faculty Development teams across England who made this programme a success.

EM President
Dr Katherine Henderson

Executive Summary

Background

The Emergency Medicine Leadership (EMLeaders) Programme, launched in April 2018, is a 4-year initiative delivered through the combined commitment of the Royal College of Emergency Medicine (RCEM), Health Education England (HEE) and NHS Improvement, England (NHSI/E). In 2017 these organisations began developing a leadership programme to support the Emergency Medicine workforce from trainees through to consultants.

Introduction

EMLeaders has been tailored to develop the leadership skills of those working within the Emergency Department (ED), focusing initially on EM trainees and consultants. The purpose of the programme is to improve the quality of leadership skills being deployed in the EM operational environment, focusing on knowledge and application of leadership theory; managing difficult decisions; handling challenging and conflict situations; and creating a learning culture which supports new trainees through their career journey. In July 2021, an independent evaluation of the EMLeaders programme was commissioned, with the work undertaken by a team of health researchers at Coventry University.

Aims and Objectives of Evaluation

A structured evaluation framework was applied to assess the extent to which the EMLeaders initiative has helped participants to develop and embrace the leadership skills required for personal and team resilience and to examine the likely impact of the programme on staff retention and staff career choices. Key objectives were to assess the perceptions of the programme amongst trainees and other beneficiaries, explore the design of the curriculum and training delivery, and estimate the costs, outcomes and return on investment of the programme compared with other training.

Design and Methods

The evaluation deployed a mixed-methods approach to assess the impact of the EMLeaders programme for all groups of beneficiaries. These include trainees in EM, consultant supervisors and Leadership Faculty. It adopted the level 1-5 Kirkpatrick Evaluation Framework (Kirkpatrick 1994) approach to explore impact at individual, team and strategic levels, considering: the reach; reaction to; learning; behaviour; and results of the programme. A range of data collection methods were used including rapid desk review, an online survey in England, interviews and focus groups, and economic analysis.

Results

The overall data set comprised a desk review of 270 documents, 417 completed survey responses, 30 qualitative interviews, plus funding allocation and e-module completion rates (2018-2021). Triangulating the data retrieved from these sources has enabled a robust evaluation revealing the following findings:

Level 1: Reach

The quantitative data suggest that EMLeaders has achieved good reach across England. Trainees completed a total of 7,637 e-modules between November 2020 and October 2021.

Though more modules were completed in Northwest & Mersey (1,681 modules), followed by Southeast (1,598 modules), there was no statistically significant difference in the likelihood of e-module completion between regions. Desk review documents indicate that 934 trainees (84% of England-based EM trainees) participated in phase one introductory sessions. However internal records identified lower level of attendance among the consultant population. Of the 417 survey respondents, 177 had experienced the EMLeaders programme, slightly more women than men, with the largest number of respondents from London and the Northwest & Mersey (both 33 respondents) and the lowest in the Northeast (4 respondents). Survey respondents were largely representative of the wider RCEM membership. Responses indicate there was a dip in staff engagement with the programme in 2020, with recovery evident in 2021, coinciding with the COVID-19 peak and its dissipation. Qualitative data indicates that there was some disparity in reach, due to different levels of EMLeaders activity in different regions. In addition, whilst e-learning modules have achieved reasonable reach, the work-based learning elements were less evident, with many trainee respondents largely unaware of this component of EMLeaders. Some data indicated that staff from smaller district general hospitals may experience more difficulty engaging with the programme due to workload challenges.

Level 2: Reaction

Most respondents were very positive about the EMLeaders programme, would recommend it to others, and wished to see it retained and further developed. The specialist EM focus was highly valued. Consultant respondents were especially positive, with more varied responses from trainees. Respondents with a disability were less positive about support from their HEE EM School and Faculty regarding their learning and development as a leader and had less positive workplace wellbeing, although they tended to rate leadership training more positively than those without a disability. Compared with no training, those undertaking EMLeaders training demonstrated statistically more positive ratings in the following seven statements, suggesting that EMLeaders training might have a positive impact on those specific aspects: I am knowledgeable about clinical leadership; I know how to apply clinical leadership on the shop floor; I am empowered to make decisions in the workplace; I can manage the challenging environment of the ED; I am positive about my ability to influence the EM work environment; I am confident in my leadership and; I am confident in facilitating teams. Qualitative data suggested that less experienced trainees may find some of the content difficult to apply, depending on their specific role. Many trainees expressed fatigue and dissatisfaction with asynchronous self-directed e-learning modules, finding the volume excessive, and wanted more face-to-face contact during the programme to share experiences and participate in practical activities.

Level 3: Learning

Respondents felt that EMLeaders had a high level of practical utility, with both consultants and trainees identifying specific areas of learning. Survey responses indicated that their main method of engaging with EMLeaders was via the e-modules. Participating in the Communities of Practice (CoP) was less common. Most commonly completed modules were the three Stage 1 core sessions ‘leading self’, ‘leading teams’ and ‘leading systems’, and the least common Stage 2 ‘leading strategy.’ Learning on the modules was positively rated as increasing

leadership knowledge, competence and confidence. Qualitative survey data confirmed that the impact on consultants and Faculty members was particularly strong, with consultants feeling better able to support trainees as a result of the programme. The social learning aspect of EMLeaders was considered key to their engagement. Consultants valued their personal 'learning journey', identified enhanced supervisory and teaching behaviours, and felt they had become more compassionate and balanced leaders as a result of EMLeaders. Trainees identified that they had further developed their communication styles and had acquired greater self-awareness and a 'leadership lens'. A number of trainees identified feeling more empowered, reflective and compassionate towards themselves as a result of the programme

Level 4: Behaviour

The project was not able to truly ascertain whether EMLeaders had led to actual changes in behaviour in the workplace. However, qualitative data provided useful insight with respondents giving specific examples of behaviour changes in relation to managing conflict, challenging poor practice, and providing improved leadership in the team. Consultant survey respondents identified taking a more self-care approach, consciously role modelling leadership behaviours and changing their communication styles. Because trainees were generally unaware of the work-based learning component of the EMLeaders programme, it is unclear whether the programme is leading to a change in EM workplace culture or whether further learning and development is being cascaded. However, in discussing ways to enhance the EMLeaders programme, trainees considered that more practical exercises and simulations would help to bring the training to life. Trainees highly valued opportunities to hear consultants talk about their own leadership experiences throughout their careers.

Level 5: Results of the Programme

The evaluation indicates that EMLeaders has gone part way to achieving its strategic goals. Participants in the programme have developed enhanced knowledge of clinical leadership and how to apply it on the shop floor. Some participants have reported becoming more empowered as a result of EMLeaders to tackle challenges in the workplace. The social learning elements of EMLeaders have made a positive difference to the cohesiveness of the EM community. Considerable time and expertise has gone into developing EMLeaders. There are many positives within the curriculum itself, but trainees and consultants also felt personally valued as a result of the programme. While data were lacking on full programme costs and outcomes, the economic evaluation indicates that EMLeaders is comparable to other leadership training received by EM physicians in terms of satisfaction, and is likely to offer a better financial return on investment compared to these other courses, as well as providing additional non-monetary benefits over time. Prior to EMLeaders, leadership training was *ad hoc* with no consistent pattern reported by 90 survey respondents, apart from online delivery and no work-place element.

Conclusion

Based on economic analysis EMLeaders is likely to offer a financial return on investment when compared with previous leadership training undertaken by EM physicians. The survey results indicate that EMLeaders training has a positive impact on doctors' confidence in their knowledge of, and application of leadership skills resulting in feeling empowered to make

decisions and influence the EM workplace. Since e-learning resources can easily be updated, are specific to EM, and can be accessed at no cost to clinicians, the programme can create support for lifelong leadership learning and development. Doctors who had engaged in the EMLeaders programme identified advantages and benefits of it, and cited behavioural changes likely to improve teamwork, communication, self-care and compassionate practice. These factors could improve intention to remain in EM and ability to role model positive leadership behaviours. Further evolution is needed for the full potential of the programme to be reached. It will be important to engage a wider range of consultant supervisors to support work-based learning and build skills, knowledge and leadership confidence. More people need to be engaged in the communities of practice, and face-to-face elements of the programme should be retained where possible.

1. Introduction

The Emergency Medicine Leadership (EMLeaders) Programme, launched in April 2018, is a 4-year initiative jointly created by the Royal College of Emergency Medicine (RCEM), Health Education England (HEE) and NHS Improvement, England (NHSI/E). In 2017 these organisations committed to investing in a leadership programme to support the Emergency Department (ED) workforce, from trainees through to consultants. The programme was developed in response to the urgent need to bolster the Emergency Department (ED) workforce, recognised to be working in a healthcare environment acknowledged for its intensity, often resulting in staff burn-out and attrition. Furthermore, the programme responded to the NHS Interim People Plan (2019) which recognises the importance of effective leadership training. This report provides an external evaluation of the leadership programme, undertaken by a team of researchers from Coventry University as commissioned by HEE.

2. Background

The EMLeaders Programme has been created to develop the leadership skills of those working within the Emergency Department (ED), initially trainees, through an EM specific training programme. It teaches learners about leadership; what it is and how we can all become better leaders whatever our grade or clinical role in emergency medicine. This is a unique programme as it is specialty specific and as such is the first of its kind. The purpose of the programme is to improve the quality of leadership skills being deployed in the EM operational environment and to ensure that that those within the ED are:

- more knowledgeable about clinical leadership and how to apply it on the shop floor.
- empowered to make decisions in the workplace and manage the challenging environment of the ED
- supported by the School leadership faculty with their learning and are enabled to feedback personal experiences or concerns.

The components of the EMLeaders programme are set out in Appendix 1. In July 2021, HEE commissioned a 9-month evaluation of the EM Leaders Programme, to measure and evaluate its impact using a mixed methods approach. The evaluation specification required the following components to be achieved

a. Measure the impact, value and range of the EMLeaders training programme;

b. Demonstrate how the EMLeaders Programme is being implemented in the 12 schools across England

c. Measure the impact of the variations in implementation models on the primary aims of the programme

d. Extract any commonalities and recommendations to build a model framework for delivery.

3. Aim

To achieve the above specification, the evaluation used a structured framework to evaluate the extent to which the EMLeaders initiative has helped participants to develop and embrace the leadership skills required for personal and team resilience and examine the impact of the programme on staff retention and staff career choices.

4. Objectives

A number of objectives were established as follows:

- Provide an overview and mapping of activities provided by each of the 12 schools.
- Assess the perceptions of the programme amongst trainees - to include knowledge gain against course learning objectives, application of leadership skills, decision-making, empowerment, support, feedback and potential impact on career intentions).
- Assess the perceptions of the programme amongst all other beneficiaries - to include knowledge and application of leadership skills, decision-making, empowerment, support, feedback and potential impact on career intentions.
- Evaluate the design of effective curriculum and training delivery (including eLearning).
- Assess the impact of the Covid-19 pandemic on programme delivery.
- Assess staff attrition rate during the programme and compare with existing baseline data.
- Evaluate the cost-effectiveness and return on investment of a national programme.
- Provide recommendations based on the findings on how this programme could be tailored, adapted, and improved for EM and other specialties.

5. Evaluation Design

This independent evaluation deployed a mixed-methods approach to assess the impact of the EMLeaders programme for all groups of beneficiaries. This has included trainees in EM, consultant supervisors and Leadership Faculty. It has adopted the level 1-5 Kirkpatrick Evaluation Framework (Kirkpatrick 1994) approach to explore impact at individual, team and strategic levels.

Table 1. Kirkpatrick Evaluation Framework

Level 1 Reach	Number of events, workshops, activities, participants involved, demographics, measures of coverage
Level 2 Reaction	To what extent participants react favourably to or actively engaged with the training. Engagement, participation of diverse groups, enjoyment, confidence, activities undertaken, assessment measures
Level 3 Learning	To what extent participants acquire the planned knowledge, skills and attitudes based on the training. What is the learning gain, impact on sense of belonging and connectedness, career benefit
Level 4 Behaviour	To what extent participants apply what they learned during training when they are at work. To what extent trainees were aware of their behaviour change. How learning, knowledge and new skills are applied in different contexts. The impact on the organisation and the ED.
Level 5 Results including Return on Investment, cost effectiveness	To what extent targeted outcomes occur as a result of the learning events or activities. The extent to which programme has achieved strategic goals and priorities. Monetary value is compared to the cost of the training

6. Data Collection

The evaluation drew on key sources of data as follows:

I. Rapid desk review of the HEE EMLeaders programme data since inception in 2017/18, supplemented with other relevant literature and documentation;

II. Online surveys with all groups of programme beneficiaries from all 12 schools;

III. Online interviews or focus groups with EM trainees and consultants and Leadership Faculty

IV. Collaborative workshop with staff involved with the programme – delivery and participation.

V. RCEM costs data for EM Leaders and Programme Activities staff (PA) Allocation provided by HEE

VI. Session data from HEE providing details of module completion by school, job title and career grade

7. Desk Review

7.1 Desk review aims

This desk review was conducted to provide an understanding of the aims of the programme and description of the EMLeaders framework. It also sought to understand the theoretical underpinning applied to the programme and map the activities, discussions and changes which were made during its implementation. It was intended that this data analysis would provide comparison data to our independent findings and inform the qualitative evaluation and data analysis. The desk review was initially intended to inform our evaluation more significantly, such as in guiding the survey design, however, due to timing challenges it was conducted in parallel with other strands of the evaluation.

7.2 Desk review methods

The documents provided by HEE were systematically reviewed. A brief description of the content and type of document (e.g., meeting minutes, internal reports, terms of reference, internal evaluation, etc.) were noted, and each document was given a unique ID. The documents were logged in one central excel spreadsheet with a hyperlink to allow easy access to the materials. Each document was ranked for potential importance (high, medium, low, unsure). The extraction form was designed *a priori* by the research team and the relevant documents were reviewed to extract data to populate each field, using the rank of the document to guide extraction of data.

We extracted data on the strategic aims and visions of EMLeaders and how the programme developed and was adapted over each phase, as well as the impact of Covid-19. We reviewed all the evaluation data from raw data on study day evaluation forms through to the published internal reports.

7.3 Findings

7.3.1 Overview of the programme

It was challenging to extract data on the structure of the programme and the activities covered in each phase from multiple documents, particularly with the Covid-19 amendments. Therefore, we have summarised our understanding of the programme structure in one overview figure for simplicity. Over 270 documents were reviewed. These included a range of information sources such as presentations, reports, raw data from course evaluations, course materials, meeting minutes and emails, and feed-back from individual schools. Documents spanned the time period from March 2019 to September 2021.

			Significant impact of COVID 19 →	
	Phase I Oct 2018 -Sept 2019	**Phase II** Oct 2019 - Mar 2020	**Phase III** Apr 2020 - Mar 2021	**Phase III** Apr 21 - Mar 22
Key Focus	**Concept development and infrastructure**	**Pilot design & delivery**	**Programme development (& adjusting to COVID)**	**Integrating into teaching & handover**
Key Activities	• Developing the EML framework • Develop and deliver an introductory Leadership session to trainees (48 delivered, n=1046 trainees attended) • Initial plans for the 9 modules developed. • National Faculty appointed • EM leadership groups established in each school (3 roles: Clinical; SIM; QI). • 3 Development days held for EM Faculty	• Pilot study days for the 9 modules developed in co-design process involving leadership experts, project team and EM consultants in the newly established EM Faculty. • Delivery of pilot sessions (at least 1 per school) between Nov 2019 and Jan 2020. • EML programme continued to work with Faculty members, who were tasked with developing their networks. • 1 development day held fo Faculty in Feb 2020	• Development of EML hybrid model (3 core e learning modules and 6 complementary modules) • Regions developed facilitated workshops to deliver training (*Much heterogeneity between regions*). • Developed bite-size exercises to support shop floor learning. • Delivered Facilitation Skills training to Faculty. • Train the trainer events developed and delivery commenced Nov 2021. • Survey conducted to explore leadership during COVID pandemic. • EML framework revised to align with new EM curriculum. • Leadership assessment form developed to support workplace learning. • ******teaching halted Apr-Oct due to COVID******	Ongoing.... • 3 National school Faculty development days Apr 2021 - Mar 2022. • 10 ½ day Regional Development days for Consultants (*"Train the Trainer"*). • 3 Cohorts of Consultant Trainers set up & 3 development days per cohort planned. • Schools running their own events . • Further consideration of multi-professional expansion (*offering e-modules, access to leadership resources, expansion to local teaching)* Evidence to be collated with a view to developing multi-profession EM teaching frameworks.
Outcome evaluation tools	• Post-event survey • Attendee numbers • Feedback form from faculty • FMLM (Leadership Consultants) evaluation report • Achievement of workplan outcomes	• Post-event hand written evaluation **not anonymised* • Attendee numbers • Pre- and post-course surveys to assess knowledge shift • Faculty survey to those delivering the training	• e-module evaluation on-line	• CoP survey • Regional development day post-event survey • School Faculty 2 monthly reports • School Faculty Impact assessment
Noted challenges	• Budget uncertainty (noted impact on morale and credibility of the programme by programme leaders)	• None specifically noted	• Impact of COVID on teaching • Some initial frustration with on line delivery (functional e.g. break out groups not working) • Significant budget loss due to COVID	• Clinical pressures still significant due to COVID (e.g. influencing DNA & attendance). • Sickness placing stress on EM Schools Faculty

Figure 1. Programme Overview based on desk review

7.3.2. Theoretical underpinning of the programme and supporting behaviour change

The implementation of the programme was informed by the Lombardo model for workplace learning. Information on how the theoretical model was used to inform the design of the teaching programme or to effect behaviour change was not available. Implicit in the design, however, seems to be social learning theory in terms of shared learning within study days, but this was not explicitly noted in the documents reviewed. From a behaviour change point of view the tenet of the programme focuses primarily on enhancing capability (developing knowledge and skills) and to a degree on improving social opportunity by developing a leadership support culture amongst trainees and supervisors.

7.3.3 Independent assessment of qualitative themes from Stakeholders

The image below provides a summary of qualitative themes from each stakeholder group retrieved from the desk review data set.

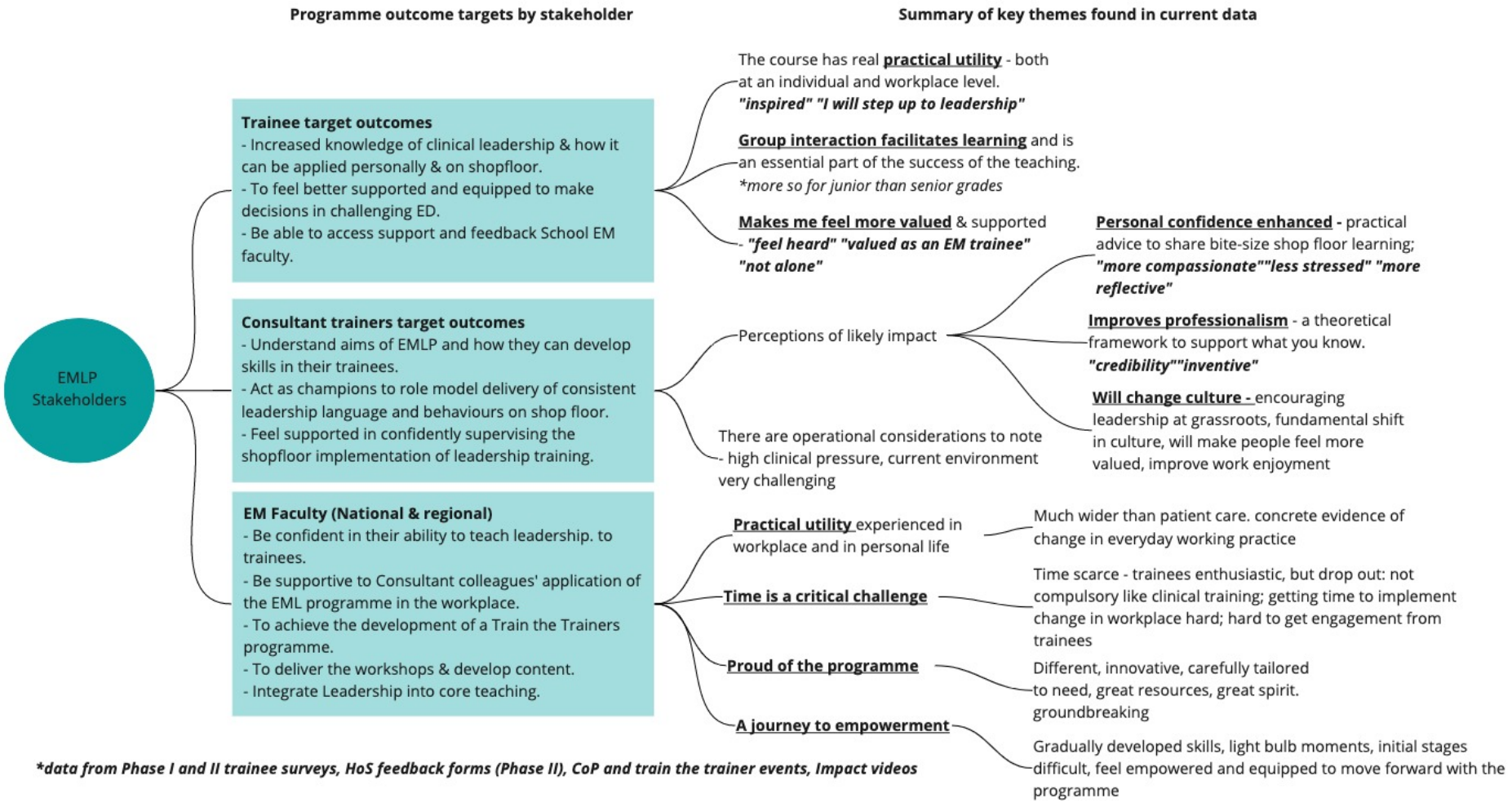


Figure 2. Qualitative Themes from Desk Review

The data suggest that at both trainee and consultant level the courses were well received and gave individuals practical tools they could take back to the shop floor and which they intended to use. The face-to-face interaction and shared social learning were valued by participants (especially the more junior staff) and were noted by external leadership facilitators to be something that was different to usual medical training (compared to the direct clinical learning techniques). These were approaches which the faculty members had to learn and become comfortable with, and which they did learn successfully. The data suggest the e modules were harder to engage with. However, the information on this was limited. Faculty and consultant supervisors considered that the programme had potential to change the culture of the ED. Some Faculty suggest positive potential benefit from the programme.

The programme developers and faculty went through a personal journey during development of the programme, gradually developing their skills to a point that that they felt equipped to carry the programme forward. They were nervous about losing the expert leadership support but this appears to have been successfully addressed through development days focussing on developing facilitation skills.

Time to study and for personal development in the context of the extreme pressures of the clinical environment has been a clear challenge for this programme, especially as the training is not mandatory. One faculty member in the video interviews suggested that trainees were willing to attend training days but were less keen to do additional work. Consultants suggested challenge in achieving the 70% workplace learning because of the day-to-day stresses. Faculty members noted that they had to use specific techniques to preserve attendance – like allocating study days on rotas before leave and adding leadership training to other compulsory RCEM study. In addition, there was some fear that EMLeaders may be considered as just further curriculum workload. Face-to-face social learning and support was an important factor in the success of the programme according to external leadership experts and to the trainees taking part in the Phase I and II study days.

Mixing grades within development sessions had varied reviews. Whilst the junior trainees got great value from learning from others, there were some suggestions that more senior doctors dominated the discussions. Senior trainees also suggested they would value specific training for their own grade.

These findings should be interpreted with caution. This data is limited in that it is primarily taken from written course evaluations and Head of School reports; thus, the ideas and thoughts are not well explored. The evaluation reports are also not anonymised potentially limiting disclosure. The impact videos are edited and potentially represent a positive face for EMLeaders. This feedback data is also primarily from the early stages of the programme when the introductory and pilot phase was delivered face to face in full day sessions away from the medical setting.

7.3.4 Performance evaluation

We mapped the evaluation data to the Kirkpatrick Evaluation Framework to help us assess whether the trainees put the learning into practice and if it positively impacted their role and the wider organisation. It was noted that the data was concentrated on levels 1,2 and 3 of the Kirkpatrick Evaluation Framework (overleaf) and the wider evaluations of impact were limited.

	Levels	Definition	Evaluation	Findings
	Reaction	Measuring the participants initial reaction to gain an understanding of the training programme and valuable insights into the material quality and facilitation of teaching. For faculty members reaction to delivering the sessions is measured.	**Trainees:** • Phase **I** handwritten course evaluation • Phase **II** course evaluation & Pre- and post-course survey • Phase **III** online module scores **Consultants:** • Phase **III** course evaluation from CoP days and regional development days. **Faculty:** • Post-delivery evaluation	**Trainees:** • Learning satisfaction was scored highly (4.32/5 in Phase **I** and in Phase **II** between 3.7 and 4.6/5 depending on the modules experienced. More than 95% said they would recommend the course to others. Social learning/interaction valued **Consultants (train the trainers):** • Satisfaction rating was 4.7 for the CoP train the trainer event (data based on one event, n=12) and feedback from "train the trainer" regional development days was very positive (n=135). Other scores very positive - Curriculum update 93% good/V good; EM leaders session, resources, scenarios 85% good/very good; Leadership workshop 88% good/very good. **Faculty:** • Faculty enjoyed delivering the sessions and found then relatively easy to deliver e.g. phase **II** *How easy to deliver? 89% easy - moderate.* Some anxiety at end of Phase **II** as to how critical specialist Leadership support may be. **Note on Reach:** The reach of the programme amongst trainees is relatively high (for example 54% EM trainees in England (n=934) attended one of the Phase **I** introductory sessions. A high level of DNA in consultants was noted (42%), considered to be a result of clinical pressures
	Learning	Measuring how much information was absorbed during the training and did it meet the learning objectives? For Faculty members, do they have the ability and confidence to deliver the modules again? Do they have the knowledge to design and develop new modules and supporting materials. Do they have more knowledge of clinical leadership?	**Trainees:** • Phase **I** - course evaluation • Phase **II** - pre- and post course survey **Consultants:** • Phase **III** course evaluation from CoP days and regional development days. **Faculty:** • Pre- and Post-delivery evaluation & 2 monthly reports • Impact videos	**Trainees:** • Course evaluations indicate that participants largely felt the teaching met the learning objectives. In particular trainees reflect upon the positive value of conflict management skills, knowledge of themselves and having "difficult conversation" skills as a result. High practical utility noted by participants. • Pre-post-event surveys to measure shifts in knowledge indicate a potential positive result - e.g. *understanding of clinical leadership - 21% more participants ranked their knowledge as medium/high following the training (n=73).* [analysis from **HEE** presented as nominal data analysis while numerical data score 3.6-3.7/5 (same as prior) therefore data inconclusive] **Consultants:** • Positive responses to the value of the training with very big shifts in feeling equipped to support trainees (99%) for example. **Faculty:** • Modest increase in knowledge indicated by surveys (59% to 63%), but numbers small and quite high self-evaluation of knowledge before training (n=27), therefore data inconclusive. • Majority confident to deliver the sessions (yes 21/27) and develop new materials (yes 19/27).
	Behaviour	Measuring how training has influenced behaviour for the participants and evaluate how they apply their learning in the workplace. For Faculty, have they begun to demonstrate/role-model the aims of the programme? Has their behaviour changed in the **ED**? Are they embedding leadership training into teaching?	**Trainees:** • Phase **II** - pre- and post course survey **Consultants:** • No direct evaluation **Faculty:** • Pre- and Post-delivery evaluation & 2 monthly reports • Impact videos	**Trainees:** • Behavioural change on the shop floor and improvement in leadership skills amongst trainees have nor been assessed. • Survey data indicates potential change but more in depth qualitative evaluation may be helpful. **Consultants:** • No data evaluating change in consultant behaviour. Surveys indicate those attending training have the improved confidence and ability to teach leadership (23% increase) but unclear how this translates to practice. **consultants note clinical pressures as a barrier to this and highlight the challenges of the current environment. **Faculty:** • Anecdotal evidence of value of training in developing practical leadership knowledge and skills of the Faculty and that it influences practice in the workplace. • Good evidence that **EML** programme being incorporated into teaching
	Results	Measure and analyse the impact of the training at an organisational level. Does it support strategic goals? (e.g. retention and/or career progression, influence culture? was it value for money?	**ED and trainee changes:** No direct evaluation; **Faculty:** Faculty reports of regional teaching activity	**Trainees:** • Phase **I** qualitative data indicated that trainees felt valued as a result of the investment in their personal development. In addition, getting away from the medical environment, being treated well (nice food, time to socialise etc. "commercial training"), added to the positive impact for trainees. However, no hard data to support this. • No measurement on whether they feel more supported by the Faculty or that training has changed behaviour in the workplace. **Consultants:** • No measurement of changes to consultant behaviour or general culture of the **ED**. **Faculty:** • Data from schools does indicate that leadership training is becoming embedded in general teaching.

Figure 2a. Evaluation findings for each stakeholder group according to the Kirkpatrick Training Evaluation Model

7.3.5 Limitations

The evaluations undertaken by the programme delivery team have primarily concentrated on reaction to the training and the learning experience, and have been gathered using surveys. There has been some effort to evaluate change in knowledge as a result of the training and how behaviour has changed 2 months after receiving the training. The latter data do suggest positive benefit, but the data is inconclusive due to small sample sizes. Not all surveys referred to in planning documents have been located, especially in the later phases. Detailed activity by school in Phase IV has not been noted and comparisons between schools not drawn out due to time restriction to conduct this desk review.

8. Survey

8.1 Methods

An online survey was developed to explore the impact of EMLeaders on key aspects of professional working in Emergency Medicine. The survey focused on three groups of participants: those who had undertaken 'EMLeaders Training', those who had undertaken 'Other Training' in leadership, and those who had undertaken 'No Training' in leadership. Questions were developed based on the evaluation tender specification issued by Health Education England (HEE), which also reflected the specific aims of the EMLeaders programme (available at https://rcem.ac.uk/em-leaders-programme/, Accessed 8/2/22), which were *"to ensure that that those within the ED are:*

- *more knowledgeable about clinical leadership and how to apply it on the shop floor.*
- *empowered to make decisions in the workplace and manage the challenging environment of the emergency department.*
- *supported by the School leadership faculty with their learning and are enabled to feed back personal experiences or concerns."*

Draft survey items and response items were amended based on extensive feedback from members of the evaluation team, including two EM consultants (CT and CL), and staff from the Royal College of Emergency Medicine (RCEM) and HEE. The formatting of items related to demographic and professional information mirrored that used in RCEM membership surveys. The final wording of questions and response items is clearly articulated in the Results section.

The survey was hosted on JISC Online Surveys (available at www.onlinesurveys.ac.uk, Accessed 8/2/22) and was extensively piloted and refined before being advertised to potential participants. Item logic was applied to ensure that items were relevant to each of the three groups and all items were made compulsory to ensure data completeness. The online survey had study information, a privacy statement and explicit informed consent built in. It was made clear in the study information that participants could withdraw their consent simply by closing their internet browser. Data completed to that point was deleted but the overall number of participants starting and completing the survey was recorded by the system. Study information and request to participate, including a link to the online survey, was distributed by the RCEM membership team to all RCEM members (n=9,212). An initial email invitation was sent in the week beginning 20/12/21 and a reminder sent in week beginning 10/1/22. The survey closed 31/1/22. Ethical scrutiny and formal ethical approval were provided by Coventry University Ethics Service (Reference P124919). A copy of the survey is available in Appendix 3.

8.1.1 Quantitative data analysis

Demographics and details of professional background were analysed using descriptive statistics (number and proportion) both according to each group (EMLeaders Training, Other Training and No Training) and as a total cohort. RCEM shared demographics data from their membership survey (received 10/5/2022) to allow a comparison to be made between the characteristics of respondents and the overall membership. Data for the main items exploring the impact of leadership training were presented using medians (and Interquartile Range,

IQR) as the response options were ordinal in nature. The statistical significance of differences in the rating of items between groups were explored using Kruskal-Wallis Tests and post hoc Mann-Whitney Tests as appropriate. The mean values or ratings were presented to aid interpretation of the direction of any differences between groups. Questions that were specific to EMLeaders Training have been presented in a separate section.

8.1.2 Qualitative data analysis

Qualitative data from open-ended questions were analysed separately. The survey data were downloaded and the qualitative data extracted. The data were divided according to the experience of leadership training (Experienced EMLeaders; Experienced other leadership training; No experience of leadership training). A thematic content approach was taken to the analysis. Amongst those experiencing EMLeaders, comparative analysis was made between the views of consultants involved in design and delivery of the programme, the wider consultant supervisor (the Communities of Practice), and trainees (and other recipients of the programme). Similarly, in exploring the data about ideal leadership training, the analysis was carried out separately by group depending on their previous experience of leadership training. Where there were no between-group differences, the findings were collated.

8.2 Results

A total of 447 respondents accessed the online survey and 417 complete responses were received (93.3% completion rate). This represents 4.5% (417/9212) of RCEM members. Of these, 177 had received EMLeaders Training, 92 had received Other Training and 148 had No Training (respondents were only able to choose one of these options). Table 2 presents the demographic data for each group. Respondents broadly reflected the overall RCEM membership data in terms of career grade, ethnicity, sex and disability, with some minor deviations (e.g. a larger proportion of SAS Doctors and lower proportion of Advanced Care Practitioners responded to our survey relative to the RCEM membership survey and a higher proportion considered themselves to have a disability).

A slightly higher proportion of those who received Other Training were working at consultant level. A list of the self-declared ‘Other Training’ is provided in Appendix 2, but was extremely varied. Those who received EMLeaders Training were more likely to be at Trainee ST2-6 level. Unsurprisingly, those who had received EMLeaders Training were more likely to be supporting participants on EMLeaders training events.

Compared to the total ratios, a slightly higher proportion of those who described their ethnic group as ‘White’ undertook EMLeaders Training and a lower proportion undertook No Training. A slightly higher proportion of ‘Black/ African/ Caribbean/ Black British’ respondents reported receiving Other Training in leadership and a slightly higher proportion of ‘Asian/ Asian British’ respondents reported having No Training in leadership. Those describing their sex as ‘Female’ were slightly more likely to have received EMLeaders Training and less likely to have received Other Training or No Training. Those reporting a seen or unseen disability were more likely to have received Other Training in leadership and less likely to have received No Training.

Question/Response	RCEM Membership	EMLeaders Training n=177	Other Training n=92	No Training n=148	Total n=417
"Are you currently working in Emergency Medicine (EM)?"					
Yes	N/A	163 (92.1%)	89 (96.7%)	137 (92.6%)	**389 (93.3%)**
No	N/A	14 (7.9%)	3 (3.3%)	11 (7.4%)	**28 (6.7%)**
"Please select which career grade applies to you"					
Consultant	32.4%	58 (32.8%)	46 (50%)	40 (27%)	**144 (34.5%)**
Locum Consultant	2.6%	4 (2.3%)	5 (5.4%)	5 (3.4%)	**14 (3.4%)**
SAS Doctor (Staff Grade, Associate Specialist and Specialty Doctors)	12.6%	10 (5.6%)	18 (19.6%)	50 (33.8%)	**78 (18.7%)**
Trainee ST1	6.8%	7 (4%)	0	10 (6.8%)	**17 (4.1%)**
Trainee ST2	6.8%	18 (10.2%)	3 (3.3%)	4 (2.7%)	**25 (6%)**
Trainee ST3	7.5%	13 (7.3%)	2 (2.2%)	6 (4.1%)	**21 (5%)**
Trainee ST4	3.4%	17 (9.6%)	0	3 (2%)	**20 (4.8%)**
Trainee ST5	5.1%	19 (10.7%)	1 (1.1%)	3 (2%)	**23 (5.5%)**
Trainee ST6	6.2%	20 (11.3%)	1 (1.1%)	4 (2.7%)	**25 (6%)**
Physician Associate	1.2%	0	0	1 (0.7%)	**1 (0.2%)**
Advanced Care Practitioner	15.4%	8 (4.5%)	13 (14.1%)	15 (10.1%)	**36 (8.6%)**
Other	N/A	3 (1.7%)	3 (3.3%)	7 (4.7%)	**13 (3.1%)**
"Have you been involved with supporting participants on EMLeaders training events?"					
Yes	N/A	30 (16.9%)	3 (3.3%)	3 (2%)	**36 (8.6%)**
No	N/A	147 (83.1%)	89 (96.7%)	145 (98%)	**381 (91.4%)**
"Have you undertaken EMLeaders training events?"					
Yes	N/A	177 (100%)	0	0	**177 (42.4%)**
No	N/A	0	92 (100%)	148 (100%)	**240 (57.6%)**
"Have you undertaken other external leadership training?"					
Yes	N/A	N/A	92 (100%)	0	**92/240 (38.3%)**
No	N/A	N/A	0	148 (100%)	**148/240 (61.7%)**
"What ethnic group do you identify as?"					
Asian/ Asian British	27.8%	39 (22.2%)	22 (23.9%)	46 (31.7%)	**107 (25.9%)**
Black/ African/ Caribbean/ Black British	6.6%	6 (3.4%)	7 (7.6%)	6 (4.1%)	**19 (4.6%)**
Mixed/ Multiple ethnic groups	3.0%	4 (2.3%)	2 (2.2%)	2 (1.4%)	**8 (1.9%)**
Other ethnic group	5.5%	12 (6.8%)	3 (3.3%)	12 (8.3%)	**27 (6.5%)**
Prefer not to say	5.2%	6 (3.4%)	6 (6.5%)	8 (5.5%)	**20 (4.8%)**

White	51.9%	109 (61.9%)	52 (56.5%)	71 (49%)	**232 (56.2%)**
"What ethnicity do you identify as?"					
Indian	N/A	28 (15.9%)	12 (13.2%)	29 (19.7%)	**69 (16.7%)**
Pakistani	N/A	3 (1.7%)	6 (6.6%)	10 (6.8%)	**19 (4.6%)**
Bangladeshi	N/A	0	0	1 (0.7%)	**1 (0.2%)**
Chinese	N/A	2 (1.1%)	0	3 (2%)	**5 (1.2%)**
Any other Asian background	N/A	6 (3.4%)	4 (4.4%)	3 (2%)	**13 (3.1%)**
African	N/A	4 (2.3%)	4 (4.4%)	1 (0.7%)	**9 (2.2%)**
Caribbean	N/A	0	0	1 (0.7%)	**1 (0.2%)**
Any other Black/ African/ Caribbean background	N/A	1 (0.6%)	0	1 (0.7%)	**2 (0.5%)**
White and Black Caribbean	N/A	1 (0.6%)	0	0	**1 (0.2%)**
White and Black African	N/A	0	3 (3.3%)	4 (2.7%)	**7 (1.7%)**
White and Asian	N/A	1 (0.6%)	0	0	**1 (0.2%)**
Any other Mixed/ Multiple ethnic background	N/A	1 (0.6%)	3 (3.3%)	0	**4 (1%)**
Arab	N/A	7 (4%)	2 (2.2%)	11 (7.5%)	**20 (4.8%)**
Any other ethnic group	N/A	1 (0.6%)	0	3 (2%)	**4 (1%)**
Prefer not to say	N/A	5 (2.8%)	3 (3.3%)	8 (5.4%)	**16 (3.9%)**
White English/ Welsh/ Scottish/ Northern Irish/ British	N/A	106 (60.2%)	45 (49.5%)	61 (41.5%)	**212 (51.2%)**
White Irish	N/A	2 (1.1%)	5 (5.5%)	2 (1.4%)	**9 (2.2%)**
White Gypsy or Irish Traveller	N/A	0	0	1 (0.7%)	**1 (0.2%)**
Any other White background	N/A	8 (4.5%)	4 (4.4%)	8 (5.4%)	**20 (4.8%)**
"What is your sex (a question about gender identity will follow)?"					
Male	61.2%	91 (51.7%)	57 (64%)	89 (60.5%)	**237 (57.5%)**
Female	38.3%	78 (44.3%)	29 (32.6%)	51 (34.7%)	**158 (38.3%)**
Prefer not to say	0.5%	7 (4%)	3 (3.4%)	7 (4.8%)	**17 (4.1%)**
"Is your gender the same as the sex you were assigned to at birth?"					
Yes	N/A	168 (95.5%)	89 (96.7%)	139 (94.6%)	**396 (95.4%)**
No	N/A	0	0	2 (1.4%)	**2 (0.5%)**
Prefer not to say	N/A	8 (4.5%)	3 (3.3%)	6 (4.1%)	**17 (4.1%)**
"What is your gender identity?"					
Man	N/A	90 (52%)	58 (63%)	87 (59.6%)	**235 (57.2%)**
Woman	N/A	75 (43.4%)	29 (31.5%)	50 (34.2%)	**154 (37.5%)**
Non-binary	N/A	0	0	0	**0**
Gender fluid	N/A	0	0	1 (0.7%)	**1 (0.2%)**
Prefer not to say	N/A	8 (4.6%)	5 (5.4%)	8 (5.5%)	**21 (5.1%)**

Prefer to self-describe	N/A	0	0	0	**0**
"Do you consider yourself to have a seen or unseen disability? We define disability as an 'impairment that has a substantial, long-term adverse effect on a person's ability to carry out normal day-to-day activities'"					
Yes	4.9%	15 (8.6%)	15 (16.5%)	9 (6.1%)	**39 (9.5%)**
No	94.9%	153 (87.9%)	73 (80.2%)	134 (91.2%)	**360 (87.4%)**
Prefer not to say	0.2%	6 (3.4%)	3 (3.3%)	4 (2.7%)	**13 (3.2%)**
"If yes, how would you describe your disability or impairment? Tick all that apply"					
Developmental	N/A	0	0	0	**0**
Learning	N/A	5 (4.2%)	3 (4.8%)	2 (2.1%)	**10 (3.6%)**
Mental health	N/A	2 (1.7%)	4 (6.5%)	1 (1.1%)	**7 (2.5%)**
Physical	N/A	0	5 (8.1%)	3 (3.2%)	**8 (2.9%)**
Sensory	N/A	2 (1.7%)	0	1 (1.1%)	**3 (1.1%)**
Neurodiverse	N/A	6 (5%)	0	2 (2.1%)	**8 (2.9%)**
Not applicable	N/A	99 (82.5%)	43 (69.4%)	80 (84.2%)	**222 (80.1%)**
Prefer not to say	N/A	6 (5%)	5 (8.1%)	6 (6.3%)	**1 (6.1%)**
Other	N/A	0	2 (3.2%)	0	**2 (0.7%)**

Table 2. Survey Participant Demographics

N/A = Not Applicable. RCEM membership data has been reported to assist with judgements about representativeness of survey respondents. [Please note that responses to the RCEM membership survey were optional and the number of responses therefore varied from a maximum 7,291 for *"Please select which career grade applies to you"* to a minimum 5,588 for *"Do you consider yourself to have a seen or unseen disability?"* A pragmatic decision was therefore made to only present the % figures for the responses to each individual question].

Table 3 presents the median (IQR) ratings (1 = 'Strongly agree' to 6 = 'Strongly disagree') for each of the main survey statements that were rated by all three groups. The mean ratings have been included in square brackets to assist with interpretation of any differences between groups. The results demonstrate that, participants in all groups were generally positively disposed to the statements, with median ratings of 2 ('Moderately agree') in almost all cases. The only exceptions were in the No Training group for Question 1 (*"I am knowledgeable about clinical leadership"*) and Question 7 (*"I am positive about my ability to influence the EM work environment"*), both of which attracted median ratings of 3 ('Slightly agree'). There were some differences in response variability, as evidenced by the IQR associated with the median ratings.

Statistically significant differences were evident between groups for seven of the 14 statements in Table 3. In only two cases were there differences between those who had undertaken EMLeaders Training and Other Training. In the first case (Question 1: *"I am knowledgeable about clinical leadership"*), mean ratings favoured Other Training but in the second case (Question 7: *"I am positive about my ability to influence the EM work environment"*) mean ratings favoured EMLeaders training. For all seven of the statements that demonstrated differences between groups, those who received EMLeaders Training responded more positively than those who had received No Training. This was true for five of the seven statements for those receiving Other Training. There were no statistically significant differences between groups for seven of the 14 statements in Table 3, suggesting that leadership training (of any kind) may not have had an impact in those areas.

Survey statement	**EMLeaders Training (n=177)**	**Other Training (n=92)**	**No Training (n=148)**	**p-value for between group differences**
1. I am knowledgeable about clinical leadership	2 (2,3) [2.25]	2 (1,2) [2.08]	3 (2,3) [2.80]	**p<0.001*^{abc}**
2. I know how to apply clinical leadership on the shop floor	2 (2,3) [2.15]	2 (1,2) [2.02]	2 (2,3) [2.69]	**p<0.001*^{bc}**
3. I am empowered to make decisions in the workplace	2 (1,2) [2.04]	2 (1,3) [2.32]	2 (2,3) [2.57]	**p=0.002*^{b}**
4. I can manage the challenging environment of the ED	2 (1,2) [1.98]	2 (1,2) [2.07]	2 (1.75,3) [2.33]	**p=0.019*^{bc}**
6. I am enabled to feed back personal experiences or concerns	2 (2,3) [2.34]	2 (1,3) [2.27]	2 (2,3) [2.54]	p=0.244
7. I am positive about my ability to influence the EM work environment	2 (2,3) [2.36]	2 (2,3) [2.76]	3 (2,3) [2.77]	**p=0.034*^{ab}**
8. I am confident in my decision making	2 (2,2) [2.01]	2 (1,2) [1.89]	2 (1.75,3) [2.15]	p=0.087
9. I am confident in my leadership	2 (2,3) [2.13]	2 (1,2) [1.99]	2 (2,3) [2.47]	**p<0.001*^{bc}**
10. I am confident in facilitating teams	2 (2,3) [2.08]	2 (1,2) [1.95]	2 (2,3) [2.36]	**p=0.002*^{bc}**
11. I have positive wellbeing at work	2 (2,3) [2.36]	2 (2,3) [2.71]	2 (2,4) [2.80]	p=0.059
12. I am enthusiastic about pursuing a career in EM	2 (1,3) [2.08]	2 (1,3) [2.43]	2 (1,3) [2.21]	p=0.119
13. I listen effectively to other people within the ED	2 (1,2) [1.77]	2 (1,2) [1.79]	2 (1,2) [1.78]	p=0.984

14. I can recognise the differing demands within the ED	2 (1,2) [1.79]	2 (1,2) [1.67]	2 (1,2) [1.84]	p=0.143
15. I can adapt to the differing demands within the ED	2 (1,2) [1.98]	2 (1,2) [1.84]	2 (1,2) [1.99]	p=0.206

Table 3. Median (IQR) ratings for each statement answered by all three groups

The mean values [X.XX] have also been reported to aid interpretation of the direction of any differences between groups. Response categories were: 1 = Strongly agree, 2 = Moderately agree, 3 = Slightly agree, 4 = Slightly disagree, 5 = Moderately disagree, 6 = Strongly disagree *Statistically significant difference between groups (Kruskal-Wallis Test, p<0.05). All other p-values relate to statistical comparison between all three groups (Kruskal-Wallis Test). [a]Statistically significant difference between EMLeaders and Other Training (Mann-Whitney Test, p<0.05). [b]Statistically significant difference between EMLeaders and No Training (Mann-Whitney Test, p<0.05). [c]Statistically significant difference between Other Training and No Training (Mann-Whitney Test, p<0.05).

Two statements were only rated by those who undertook either EMLeaders Training or Other Training. The results showed no differences between the two groups' ratings of the support received for learning and development or of their recommendation of their training to peers (Table 4).

Survey statement	**EMLeaders Training (n=177)**	**Other Training (n=92)**	**No Training (n=148)**	**p-value for between group differences**
5. I am supported by [the HEE EM School Faculty/ colleagues] with my learning and development as a leader	2 (2,3) [2.47]	2 (1.75,3) [2.41]	N/A	p=0.725
16. I would recommend the [EMLeaders/ external leadership] training that I undertook to my peers	2 (1,3) [2.11]	2 (1,3) [2.26]	N/A	p=0.317

Table 4. Median (IQR) ratings for each statement rated only by those who had received some form of leadership training

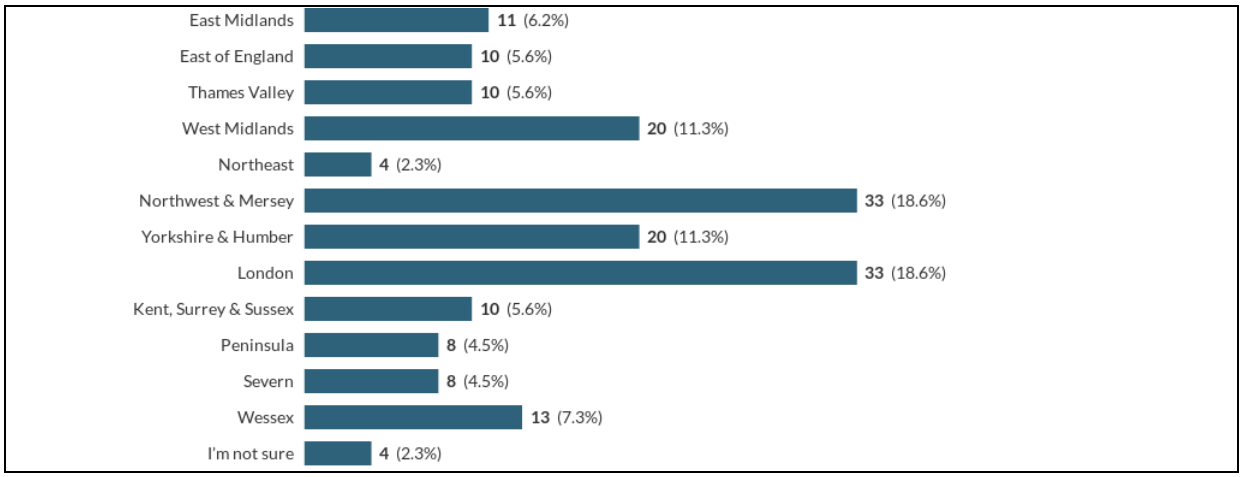
The mean values [X.XX] have also been reported to aid interpretation. Response categories were: 1 = Strongly agree, 2 = Moderately agree, 3 = Slightly agree, 4 = Slightly disagree, 5 = Moderately disagree, 6 = Strongly disagree. p-values relate to statistical comparison between EMLeaders Training and Other Training groups (Mann-Whitney Test).

Additional evaluation of EMLeaders training

As this report was primarily focused on evaluating the EMLeaders training, the data for those who had undertaken EMLeaders training (n=177) was analysed in further detail and is presented in this section.

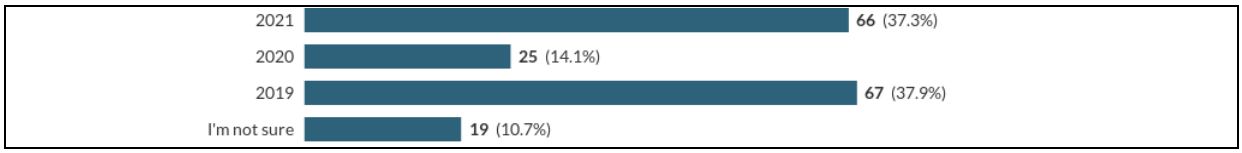
Figure 3 demonstrates that the largest number of respondents was from Northwest & Mersey and London (both n=33), whilst the lowest number of respondents was from Northeast (n=4).

Figure 3. “Within which HEE EM School region(s) did you undertake your EMLeaders training events? (Select as many as are relevant)”



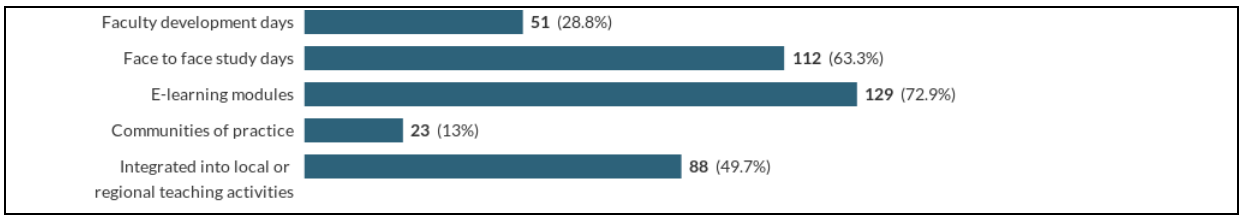
During 2020, there was a dip in initial engagement with EMLeaders training, with uptake recovering in 2021 (Figure 4).

Figure 4. “In which year did you first undertake EMLeaders training?”



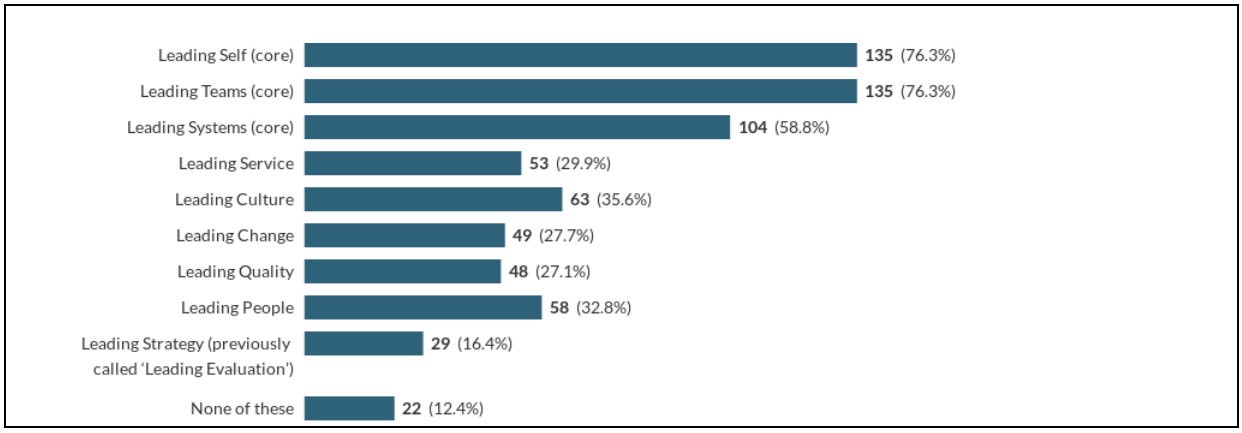
Respondents indicated that the main mode of participation in EMLeaders was via the e-learning modules (72.9% of respondents), followed by face-to-face study days (63.3%). Only 13% had yet participated in the Communities of Practice (Figure 5).

Figure 5. “Which of the following aspects of EMLeaders training have you participated in? (Select as many as are relevant)”



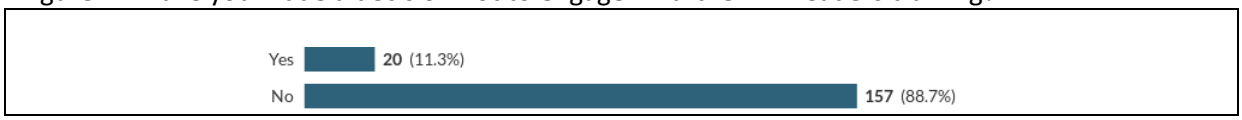
As might be expected, self-reported engagement with the three ‘core’ EMLeaders modules was higher (76.3% for ‘Leading Self’ and ‘Leading Teams’ and 58.8% for ‘Leading Systems’) than for the other optional modules (Figure 6). ‘Leading Strategy’ (previously called ‘Leading Evaluation’) was reported as the least frequently undertaken (12.4% of respondents).

Figure 6. “There are currently 9 EMLeaders modules available on the e-Learning for Health (e-LfH) platform. These may have been delivered in alternative formats (e.g., face-to-face study days) in earlier iterations of the programme. Please select which of these modules/study days you believe you have undertaken (select as many as are relevant)”



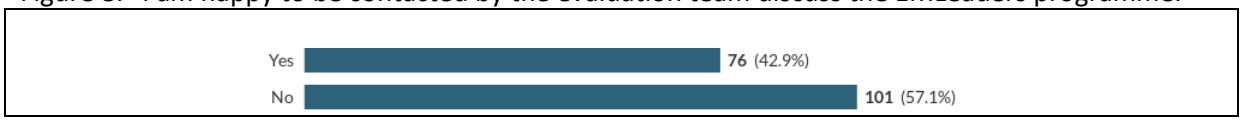
11.3% of respondents had made a conscious decision not to engage in further EMLeaders training (Figure 7) and the reasons for this are explored in further detail in the Qualitative analysis.

Figure 7. “Have you made a decision not to engage in further EMLeaders training?”



A considerable proportion of respondents (42.9%, n=76) reported that they were happy to discuss the EMLeaders programme further with the research team (Figure 8). These individuals formed the cohort approached for later qualitative interviews.

Figure 8. “I am happy to be contacted by the evaluation team discuss the EMLeaders programme.”



Key aspects of the EMLeaders data (n=177) were analysed according to sex, ethnicity, disability, and career grade to explore issues related to equality, diversity, and inclusion (EDI). This analysis is presented in Tables 5-8 below.

Females (n=78) were more likely than males (n=91) to describe their ethnic group as ‘White’ and were more likely to report a disability. Females were also slightly less likely to have completed the ‘Leading Self’ core module but were slightly more likely to have completed the other core modules (Table 5). Males rated statement 12 (*“I am enthusiastic about pursuing a career in EM”*) more positively than females, whilst females were less positive than males about statement 11 (*“I have positive wellbeing at work”*). All other main survey statements were rated equally at 2 (‘moderately agree’).

Sex	**'Male' (n=91)**	**'Female' (n=78)**
'White' ethnic group	51.6%	76.9%
Seen or unseen disability	4.4%	14.5%
'Consultant' career grade	33%	34.6%
Have you been involved with supporting participants on EMLeaders training events?	18.7%	16.7%
Completed 'Leading Self' module	79.1%	73.1%
Completed 'Leading Teams' module	72.5%	78.2%
Completed 'Leading Systems' module	57.1%	62.8%
Main survey statements	All median 2 ('moderately ag'ree'), except: **Male:** *"12. I am enthusiastic about pursuing a career in EM"* = median 1 ('strongly agree') **Female:** *"11. I have positive wellbeing at work"* = median 3 ('slightly agree')	

Table 5. Analysis of those receiving EMLeaders training by sex

Those selecting an ethnic group other than 'White' (n=68) were more likely to be male, less likely to have a disability, slightly less likely to be working at consultant grade, and less likely to have completed the core EMLeaders modules (Table 5). Compared to their 'White' counterparts (n=109), other ethnic groups rated statement 12 (*"I am enthusiastic about pursuing a career in EM"*) and statement 13 (*"I listen effectively to other people within the ED"*) more positively.

Ethnicity	**'White' (n=109)**	**All Other (n=68)**
'Male' sex	43.1%	65.7%
Seen or unseen disability	10.3%	6%
'Consultant' career grade	33.9%	30.9%
Have you been involved with supporting participants on EMLeaders training events? (% 'Yes')	16.5%	17.6%
Completed 'Leading Self' module	79.8%	70.6%
Completed 'Leading Teams' module	77.1%	75%
Completed 'Leading Systems' module	64.2%	50%
Main survey statements	All median 2 ('moderately agree'), except: **All Other:** *"12. I am enthusiastic about pursuing a career in EM"* = median 1 ('strongly agree'); and *"13. I listen effectively to other people within the ED"* = median 1 ('strongly agree')	

Table 6. Analysis of those receiving EMLeaders training by ethnicity

Respondents who reported having a seen or unseen disability (n=15) were less likely to be male, more likely to be 'White', less likely to be working at consultant grade, and less likely to have completed the core EMLeaders modules than those without a disability (n=153) (Table 7). Most survey statements were rated similarly between those with and without disability. The only exceptions were that those with disabilities rated Question 5 (*"I am supported by the HEE EM School Faculty with my learning and development as a leader"*) and Question 11 (*"I have positive wellbeing at work"*) less positively; and Question 16 (*"I would recommend*

the EMLeaders training that I undertook to my peers") more positively than their non-disabled colleagues.

Seen or unseen disability	**'Yes' (n=15)**	**'No' (n=153)**
'Male' sex	26.7%	56.9%
'White' ethnic group	73.3%	61.4%
'Consultant' career grade	26.7%	34%
Have you been involved with supporting participants on EMLeaders training events? (% 'Yes')	20%	17.6%
Completed 'Leading Self' module	66.7%	77.8%
Completed 'Leading Teams' module	73.3%	75.8%
Completed 'Leading Systems' module	53.3%	60.8%
Main survey statements	All median 2 ('moderately agree'), except: **Seen or Unseen Disability:** *"5. I am supported by the HEE EM School Faculty with my learning and development as a leader"* = median 3 ('slightly agree'); *"11. I have positive wellbeing at work"* = median 3 ('slightly agree'); and *"16. I would recommend the EMLeaders training that I undertook to my peers"* = median 1 ('strongly agree')	

Table 7. Analysis of those receiving EMLeaders training by disability

Unsurprisingly, those not working at consultant grade (n=119) were much less likely to be supporting participants on EMLeaders events than consultants (n=58) (Table 8). They were also less likely to have completed the third core EMLeaders module ('Leading Systems'). Consultants rated three statements more positively than their non-consultant colleagues: Question 3 (*"I am empowered to make decisions in the workplace"*); Question 4 (*"I can manage the challenging environment of the ED"*); and Question 14 (*"I can recognise the differing demands within the ED"*).

Career Grade	**'Consultant' (n=58)**	**All Other (n=119)**
'Male' sex	51.7%	51.7%
'White' ethnic group	63.8%	61%
Seen or unseen disability	7%	9.4%
Have you been involved with supporting participants on EMLeaders training events? (% 'Yes')	41.4%	5%
Completed 'Leading Self' module	74.1%	77.3%
Completed 'Leading Teams' module	77.6%	75.6%
Completed 'Leading Systems' module	65.5%	55.5%
Main survey statements	All median 2 ('moderately agree'), except: **Consultant:** *"3. I am empowered to make decisions in the workplace"* = median 1 ('strongly agree'); *"4. I can manage the challenging environment of the ED"* = median 1 ('strongly agree'); and *"14. I can recognise the differing demands within the ED"* = median 1 ('strongly agree')	

Table 8. Analysis of those receiving EMLeaders training by career grade

8.3 Discussion

The response to the survey was very healthy, providing much data for analysis. The three groups were largely comparable, although there were slight differences in protected characteristics. For example, compared to the total sample, those undertaking EMLeaders training were slightly more likely to describe themselves as 'White' and 'Female'. Other Training had a slightly higher proportion of people describing themselves as 'Black/ African/ Caribbean/ Black British' and having a 'seen or unseen disability' and a lower proportion of 'Female' respondents. No Training had a slightly higher proportion of 'Asian/ Asian British' and lower proportions of 'Female' respondents and those reporting a 'seen or unseen disability'. There are clearly some positive trends here, but programme leaders should be constantly mindful of EDI issues in recruitment and delivery. Those undertaking other forms of leadership training were also more likely to be consultants. This may be because this training was undertaken earlier in their careers, in advance of the EMLeaders training being developed. This group will also have had more opportunity to apply their learning in a leadership position than EMLeaders trainees.

Compared with no training, those undertaking EMLeaders training demonstrated statistically more positive ratings in the following seven statements, suggesting that EMLeaders training might have a positive impact on those specific aspects:

- 1. I am knowledgeable about clinical leadership
- 2. I know how to apply clinical leadership on the shop floor
- 3. I am empowered to make decisions in the workplace
- 4. I can manage the challenging environment of the ED
- 7. I am positive about my ability to influence the EM work environment
- 9. I am confident in my leadership
- 10. I am confident in facilitating teams

Those who had completed other forms of leadership training demonstrated statistically more positive ratings in five of those seven statements (compared with no training):

- 1. I am knowledgeable about clinical leadership
- 2. I know how to apply clinical leadership on the shop floor
- 4. I can manage the challenging environment of the ED
- 9. I am confident in my leadership
- 10. I am confident in facilitating teams

Bearing in mind that respondents in this other leadership training group were more likely to be consultants, the two statements that were missing are of interest and could be indicative of the unique contribution EMLeaders as a speciality-focused leadership training:

- 3. I am empowered to make decisions in the workplace

- 7. I am positive about my ability to influence the EM work environment

In terms of a direct statistical comparison between the two types of leadership training, responses to one statement favoured EMLeaders (7. I am positive about my ability to influence the EM work environment) and one favoured other leadership training (1. I am knowledgeable about clinical leadership).

Based on the statistical analysis, therefore, both forms of leadership training seemed to bring benefits in a range of areas, but it is difficult to recommend one form of leadership training over another. There are many potential confounders in this comparison, including the mode of training delivery. For example, it is highly likely that those who received leadership training earlier in their career received such training face-to-face. The content, duration and focus of other leadership training is also unknown and is likely to have been highly variable (Appendix 2).

Those who received both forms of leadership training rated the support they received equally positively and were also equally positive about recommending their training to their peers (all statements rated as a median score 2 = moderately agree).

8.4 Survey - qualitative findings

8.4.1 Impact of EMLeaders Training

The consensus opinion was that the EMLeaders helped improve EM leadership knowledge, confidence and competence. There were differences between the consultants who had helped develop and deliver the training compared to other consultants who may have attended a Community of Practice (COP) day but were not recipients of the course per se, and trainees – the latter who had mixed responses to the training (Figure 9).

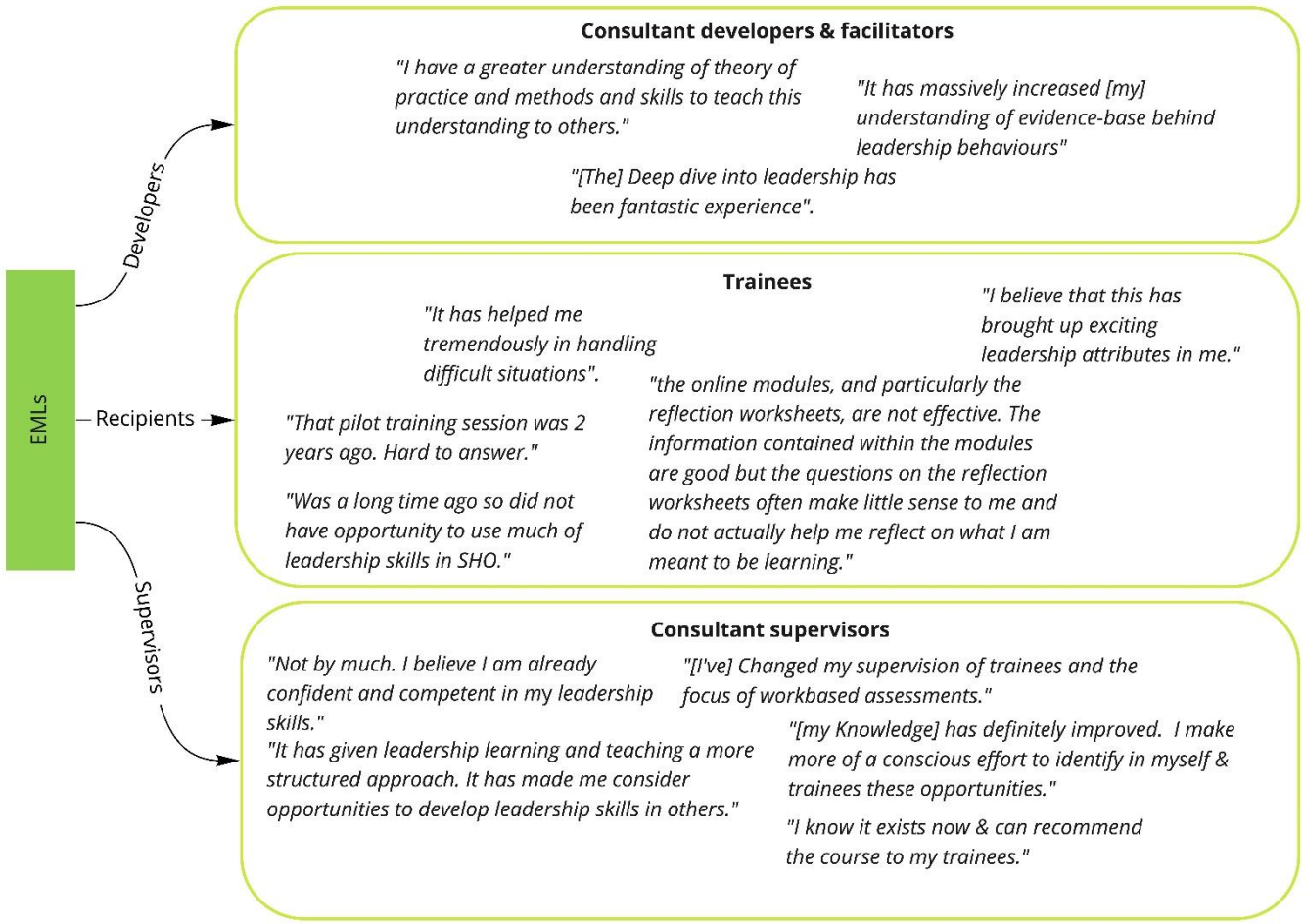


Figure 9. Impact of EMLeaders by group involvement – indicating key differences by role

a) Consultant developers and faculty members

The co-design process of developing EMLeaders appeared to have had significant and positive effect upon the leadership knowledge, confidence and competence of this cohort. They were overwhelmingly positive about their experience and noted significant impact of exposure to leadership training. This included:

- general improvement in understanding of the theory and practice of leadership;
- their ability to facilitate others in developing their skills;
- improved self-awareness and confidence to lead on the shop floor;
- concrete improvements in competence in de-escalating conflict, challenging poor practice in superiors and flexibility in leading the ED team.

It has fundamentally altered. I am now more knowledgeable in a way that I could not have achieved through normal clinical practice. My vocabulary has widened also allowing me to express leadership concepts to others in a more coherent way (Consultant).

I am able to engage with conflict better, lead junior colleagues more effectively and use feedback developmentally (Consulttant).

[my confidence is] radically altered. In the last week, I have constructively challenged the deputy chief executive in relation to behaviours and decision making of the senior leadership of the trust. I would never have even tried prior to EM Leaders. Competence [has] improved beyond all recognition, confidence has moved from a 2 to a 9 out of 10 (Consultatnt).

b) Trainees

The consensus opinion amongst the trainees was that leadership knowledge and confidence were increased as a result of the EMLeaders training. The changes relate to:

- Increased self-awareness,
- theoretical knowledge of leadership,
- understanding the impact of actions on the wider NHS environment,
- practical personal knowledge such as how to run teams better, manage busy shifts and contributing to the team.

There were some neutral comments suggesting that the trainees have not really experienced much of the programme since the pandemic and the roll-out to regional teaching:

The pilot session was two years ago so it's hard to answer.(ST3)

Difficult to answer as I have only attended a couple of sessions so far, but my knowledge of leadership in EM has not been changed by those sessions. (ST2)

There were some critics who did not feel they gained much from the training and others who were overtly critical. These tended to be the more senior trainees and those who have not experienced any of the programme in person. It is also notable that experience varied considerably with some trainees only having experienced one pilot day in 2019 and others being more actively involved and aware.

How has your knowledge or confidence changed as a result of the EM training? *"Barely", "minimally", "not significantly" (three ST6 doctors)*

I find the programme unhelpful. I don't find the regional teaching sessions (which are integrated into regional teaching) helpful and I don't like the eLFH modules. (ST6)

I feel the teaching has been hindered by the virtual environment and shop floor leadership is very much get on with it, I lost some confidence in the process particularly when introduction of the Myers Briggs personality test section which was jarring after what was an excellent talk about learning about yourself and how you can lead then a jump to a section with little evidence base like the mb test. It made me feel that this was not well thought through. (ST4)

c) Wider Communities of Practice (consultants and ACPs supervisors)

Though there have been few train the trainer events, in general the response to the value of the programme was positive. Participants reflected that the training helped improve

their credibility and ability to supervise as well as, in some cases, consolidating existing knowledge and increasing self-awareness. In general responses were more positive regarding knowledge increase and more neutral as to whether competence and confidence have changed.

8.4.2 EMLeaders: what worked well?

Responses to the question what worked well in EMLeaders are indicated in Figure 10. The most common responses were associated with group interaction – either face to face or in zoom break out groups and the enthusiasm and expertise of the facilitators. Each of these is discussed further below.

Figure 10. EMLeaders: What worked well?

Group interaction: Positives included sharing ideas, learning from others, working in small groups, engaging with peers at different levels; breakout groups. This was consistent whether the course was online or delivered in person. Where delivery had been received in person, this was preferred to online delivery – the discussion and dynamic nature of face-to-face delivery as well as the opportunity to be away from the shop floor was valued.

The facilitators: Faculty leaders were valued for their expertise and knowledge of EM and leadership, and for their enthusiasm. They were described as engaging, open to discussing different ideas, enthusiastic, good facilitators and very motivated to share their knowledge.

Zoom interaction: Where online training was mentioned it was the breakout groups that were particularly highlighted as useful, with the selection of a good mix of individuals in each

group, the small group size, and opportunity for interaction being valued. The mixture of interaction and didactic teaching was appreciated.

Other things that were raised, though not so frequently, were practical learning (relevant scenarios, practical examples of applying the theory), content to build awareness of your own styles and an availability of a mixture of learning channels (on-line e modules, face to face and facilitated online sessions). E modules were described as helpful and valuable for learning in your own time by a small number of individuals, but they were also described as *"dry & boring"* by others and *"too much work"*. Ideally, they worked as part of the mix but not a backbone of the delivery.

8.5 Impact of other leadership training

The participants were asked specifically how their knowledge of leadership in emergency medicine and leadership confidence/competence had changed. Overall, the consensus was that training had positively influenced these factors. The most commonly reported change was having learnt to recognise and value different personality styles. Other than this, there was no consensus on how knowledge had been positively influenced. Participants mentioned learning about NHS quality improvement strategies, managing personal time and resources and achieving career balance, learning about unconscious bias and having more theoretical knowledge. In response to the question about changes in confidence/competence, participants responded widely, listing factors such as becoming more compassionate, calmer, more collaborative, more able to resolve conflict and having generally improved.

> *I think I am a better doctor and a better person overall after my leadership training. I am more flexible and strong. I have understood my self worth in the team.*

Several individuals said their knowledge (and indeed confidence) had not been significantly changed by the training. Of these some acknowledged that one of the reasons for this was that the training they had received was generic, thus had not specifically helped in the EM setting:

[It was] helpful but not practical from a clinical perspective and not adapted to EM

[The] leadership module was not specific to ED and thus not giving a vast amount of knowledge to this environment.

NO - it is provided by people who in my opinion have not been exposed to the stressors that occur in the ED or NHS. They are leaders of NHS: they are people who interview well but have not managed in reality.

8.6 What worked well?

The very clear unifying theme in this part of the data was the value of group interaction. Interactive discussion, working in small groups, feedback from others and the presenters,

the support from the group and learning from the experiences of others in these interactive sessions was the most commonly reported factor contributing to the success of the training (Figure 11).

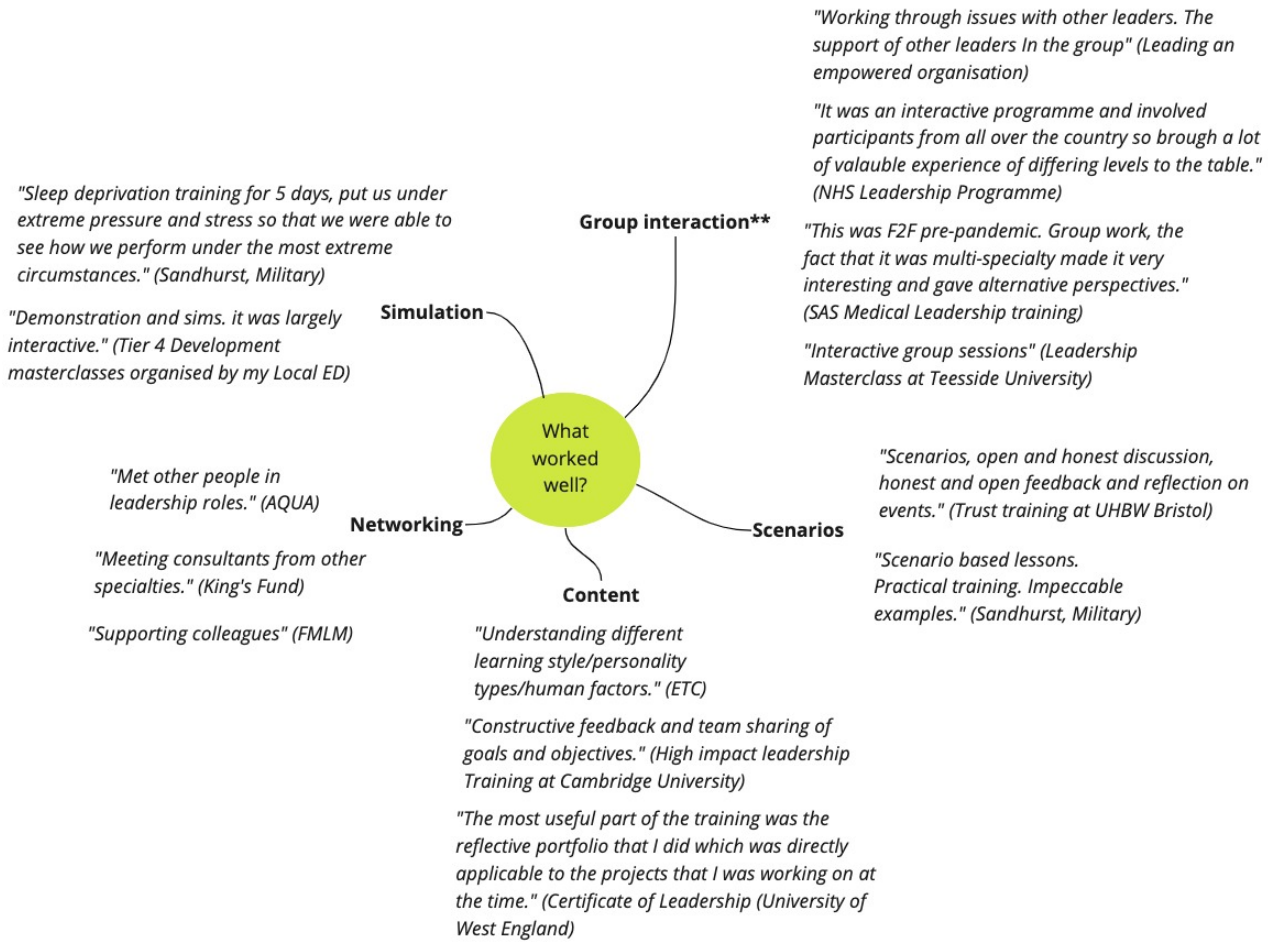


Figure 11. What worked well in external leadership training?

Learning through scenarios and simulations proved effective and provided a memorable, impactful experience, and the value of networking was noted. Collectively, this part of the survey indicates the value of social and participatory learning in this type of training. This can be achieved to some extent on-line, and two participants did suggest their online leadership training was valuable. However, the data does suggest significant value in face-to-face delivery. Six participants who contributed qualitative comments had completed military training and were very positive about the life-changing experience of this type of leadership training.

8.7 What ideal training would look like

This question was asked of three groups; those who had experienced EMLeaders, other leadership programmes or who had had no leadership training. The findings across groups were similar, therefore the results are collated (Figure 12).

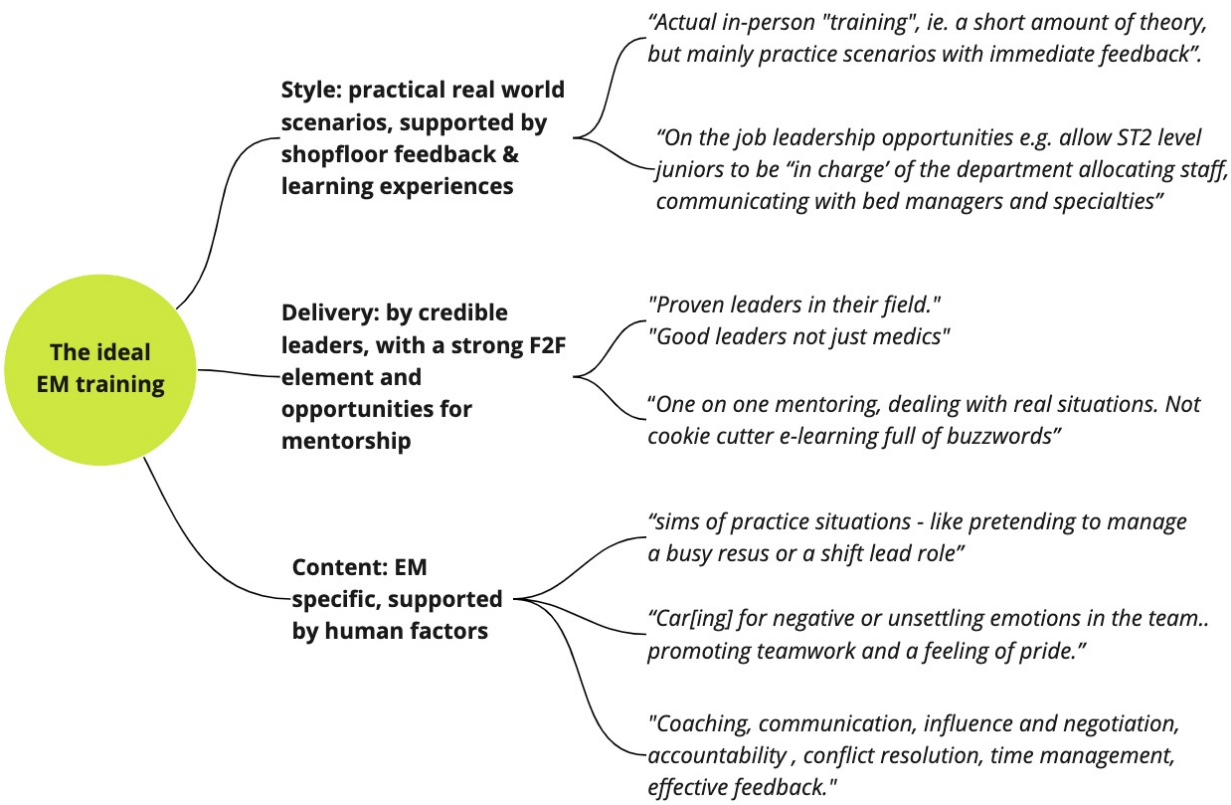


Figure 12. The consensus view of what the ideal training should look like, across survey participants.

Participants gave many suggestions about how they wanted the EMLeaders to be delivered, by whom and what the content should be, as follows:

Delivery of Programme - where & by whom?

- Credible clinical leaders were important but also non-medics who were leaders in other fields would be valued.
- Participants suggested EM Faculty should be selected from those who are recognised for their leadership ability.
- People wanted face to face leadership teaching to play a core role in the training – all groups noted that leadership education is difficult to deliver via online teaching and e learning alone. Those that had experienced EM Leaders during Covid-19 did value the sessions they had received but this was not their ideal.
- Value identified of regional training days as well as dedicated full day or multiple day immersive leadership training and one to one mentorship, plus being away from the medical environment, even residential elements suggested.
- The value of shopfloor learning was also identified as vital, yet acknowledged to be difficult to achieve: *"Much of the material should be on the shop floor, this is the biggest challenge….it is difficult to persuade trainers to engage when there are so many pressures on them regarding service provision."*
- Further suggestions included formal 360-degree feedback on shop floor leadership practice; working with a mentor in the workplace; and having feedback from trainee Extended Supervised Learning Events (ESLEs) being tied specifically to the EM modules. The value of having a mentorship programme was suggested by a handful of participants – this may include being part of a mentorship group that met over

several years, having a one-to-one workplace mentor or having mentorship sessions online.
- Protected time to attend leadership training. Whilst the EMLeaders e-modules are accessible to all UK RCEM/EM staff, other components of the training need to be extended to devolved nations.

Style of Delivery – How should it be provided?
- Practical, simulation, scenario-based, real-world teaching to play a central role in leadership training, rather than theoretical teaching. This included *"real life scenarios", "role playing", "hands on practice", "simulation based on common everyday EM experiences"*. For the few participants who had done military style leadership training, they recommended this model – practical, non-clinical scenarios, supported by real time feedback.
- Group and project work, course work, some (but minimal) theory, and opportunities to learn from each other in small group interaction.
- Mixing different grades working in interactive groups and learning from the experience of consultants and more senior trainees was seen as helpful.
- Training to be spread over a number of years and to be appropriate to specific trainee grades.

Content of Training – What should be included?
- EM specific content important in framing practical scenarios and simulations.
- Key topics - managing conflict and supporting NHS change.
- Less theoretical, and more practical, and shopfloor orientated.
- Specific topics listed included EM specific leadership problems and improving situational awareness – managing shift staff numbers and skill mix, patient flow, escalation of emergencies, problem spotting etc – managing conflict (*"turf wars"*), negotiating with specialties, getting team *"buy in",* human factors, coaching skills, collaboration.

8.8 Conclusion

Quantitative survey data indicates that those completing EMLeaders programme appear to feel more empowered to make decisions in the workplace and to influence the EM work environment. This may be partly influenced by recency bias i.e., distortion in favour of recently completed activities or recollection. In contrast, the fact that those who completed other training report feeling more knowledgeable about clinical leadership may be linked to two facts; firstly, that this group is more senior and secondly that they have had a longer time to embed their learning and knowledge having undertaken training before EMLeaders was available. Because of a level of heterogeneity in the two groups it is difficult to argue specifically for EMLeaders training based on the quantitative statistical analysis alone. However, the mixed-method study design, which includes a nested qualitative study, allows further exploration of these and other issues.

The qualitative survey data indicated that EMLeaders was valued, although regional differences in during- and post-pandemic delivery and the challenge of e-learning meant that trainees had mixed experiences and responses to the training. There was consensus across

the data that group interaction, scenarios and simulation were key to the success of leadership training delivery. EM specific context improved practical relevance of the training to the EM environment, an environment which was considered, by some, to be unique.

9. Qualitative Findings: Exploring EM consultants and trainee views

9.1 Methods

Survey respondents indicated if they would be happy to help further with the evaluation. Those who volunteered were contacted by email and invited for an online interview. We had intended to use purposive sample methods to select interviewees and then invite the remaining survey volunteers to a series of focus groups. We adapted this approach, however, as fewer volunteered to be interviewed than expected from the initial invite emails. Therefore, we contacted all those that had volunteered their contact details to invite them to an interview and did not run focus groups. We also contacted members of the initial EMLeaders development team to deepen our contextual understanding of EMLeaders. We aimed to conduct thirty interviews. Interviews took place between February and May 2022.

Participants gave informed consent to participate in the interviews via an online link to the consent form. The data were anonymised and identified with consecutive codes. Participant personal details were held in a separate password-protected document only accessible by the research team members involved in this part of the research.

9.2 Data collection and analysis

The framework for the interview analysis reflected the five key areas of the Kirkpatrick framework. This framework was used to structure the topic guide.

Interviews were conducted by two members of the academic team with emphasis given to each focusing on one participant group to improve rigour and depth. Each member of the team summarised themes within each section of the framework, for their own interviews in separate word documents. The two team members, with a third member, discussed collectively their findings and themes were refined and condensed in collaboration, under each section of the framework.

Comparisons within the framework were made across the key stratifications of, medical role (consultant, trainee, other e.g.SAS doctor), and by involvement in EMLeaders (course development or delivery); trainee or other course recipient; communities of practice (COP) or other consultant supervisors. NVivo software was used to organise the data by frame.

9.3 Participants

In total 30 interviews were conducted. We interviewed thirteen EM consultants. One was part of the national faculty developing EMLeaders, eight were part of the regional leadership faculty or were EMLeader facilitators and four were consultant supervisors and were not affiliated to the leadership faculty. Thirteen trainees were also interviewed as participants in EMLeaders training. In addition, one SAS doctor contributed to the views of participants of EMLeaders. One recently appointed consultant had also experienced EMLeaders whilst a trainee. Data from this participant was reported in both the consultant and trainee sections of the findings, depending on the relevance to each section. Overall, interviewees

represented ten of the twelve regions; East Midlands, Kent, Surrey & Sussex, London, Northwest & Mersey, Peninsula, Severn, Thames Valley, West Midlands, Yorkshire & Humber. Characteristics of the consultants and trainees involved in this part of the analysis are detailed in Table 9 and Table 10. A further three (in roles other than medical) individuals involved with the development of EMLeaders were also interviewed to give context to the development process. These latter interviews are not formally reported but some insights are added where relevant.

Table 9. Characteristics of consultants interviewed

Consultant role	% (n)
National faculty	7.7 (1)
Regional faculty	61.5 (8)
Non-faculty	30.8 (4)
Location	
East Midlands	7.7 (1)
Kent, Surrey, Sussex	7.7 (1)
Northwest & Mersey	15.4 (2)
Peninsula	7.7 (1)
Thames Valley	7.7 (1)
West Midlands	23.1 (3)
Yorks & Humber	23.1 (3)
Gender	
Male	76.9 (10)
Ethnicity	
White	69.2 (9)
Black African/Caribbean	7.7 (1)
South Asian	23.1 (7)

Table 10. Characteristics of trainees interviewed

Trainee grade	% (n)
ST2	15.4 (2)
ST3	30.8 (4)
ST4	15.4 (2)
ST5	23.1 (3)
ST6	15.4 (2)
Location	
East Midlands	7.7 (1)
Kent, Surrey, Sussex	23.1 (3)
Northwest & Mersey	23.1 (3)
Peninsula	7.7 (1)
Severn	7.7 (1)
Thames Valley	7.7 (1)
West Midlands	15.4 (2)
Yorks & Humber	7.7 (1)
Gender	
Male	53.8 (7)
Ethnicity	
White	84.6 (11)

One SAS doctor was also interviewed: female, white, london

9.4 Perceptions of EMLeaders amongst consultants and trainees

The data from the consultant interviews and trainee interviews are presented separately, as the consultants were primarily developing and delivering EMLeaders or supervising trainees and the trainees were the recipients of the training. The overall summary of the themes for each group, in relation to the key frames of the Kirkpatrick framework is summarised in Figure 13.

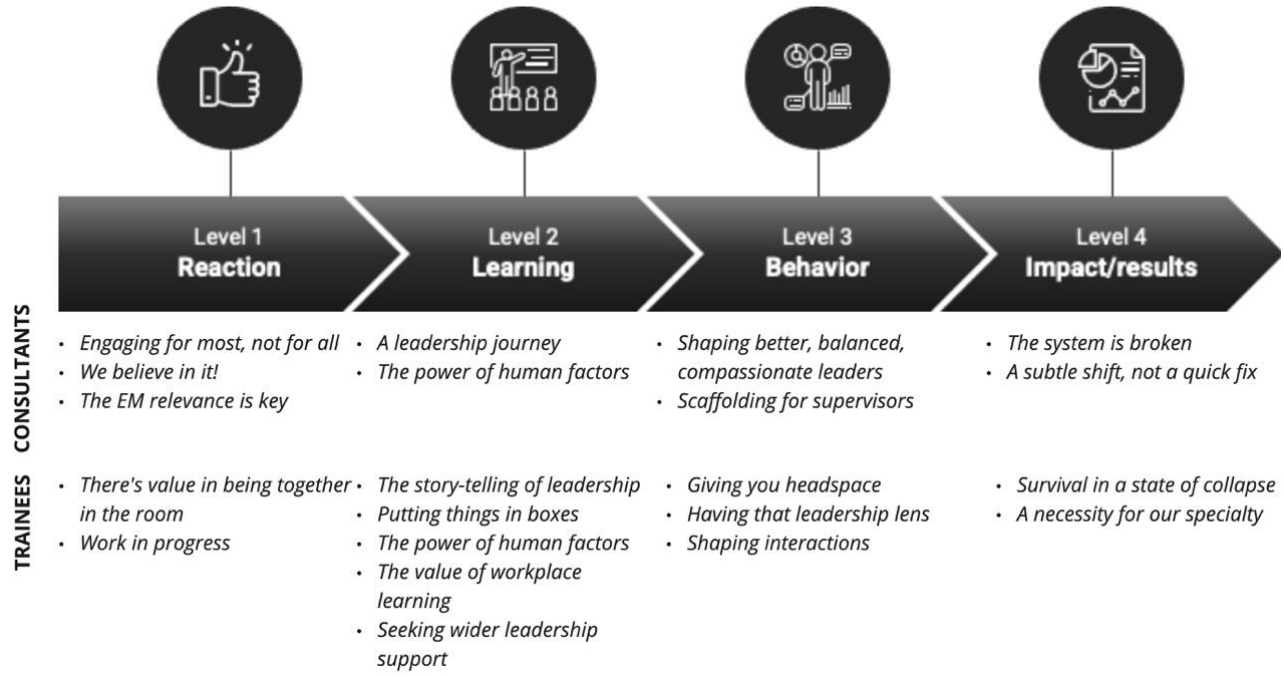


Figure 13. A summary of the key themes across the analysis

9.5 Key themes from consultant interviews

Figure 13, indicates the key themes from the consultant interviews, according to the Kirkpatrick framework and each is discussed in more detail below.

9.5.1 Reach

Members of the leadership faculty overall, reflected that EMLeaders had a good breadth of reach amongst the trainee community but that it had been more challenging to have the same degree of success amongst the wider consultant supervisor body, which had been a more recent focus of attention. The key themes identified were: *'The programme has amplitude'* and '*Train the trainers: a challenge'* as indicated in Figure 14.

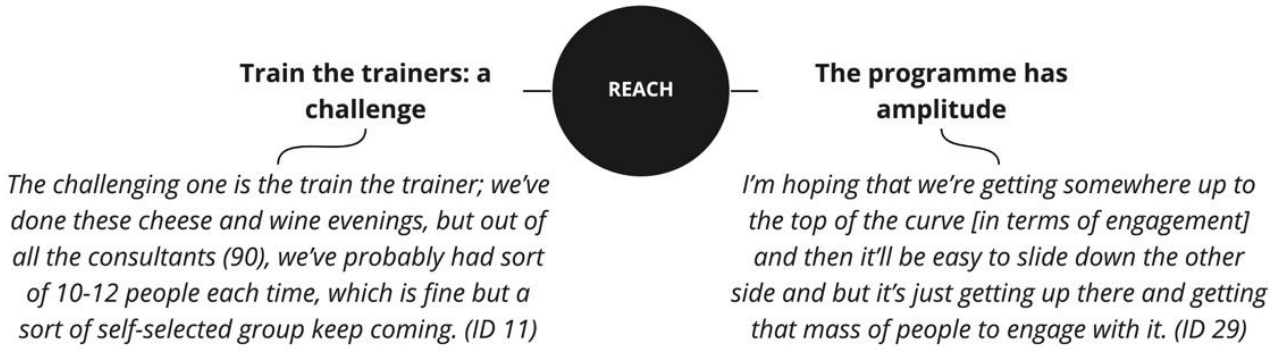


Figure 14. Consultant perceptions of the reach of EMLeaders

The Programme has 'amplitude'

The leadership faculty members considered that the programme had a breadth of reach across trainees and that the value of the programme spread by word of mouth and by workplace practice. In addition, the external FMLM leadership educator highlighted how upskilling the consultant body extends the reach of EMLeaders, as they take the skills and knowledge into their workplace.

> *The reach of the learning and the reach of the materials [is] much broader than the number of participants in the room because everybody would take their learning into their practice in their local area. I think we need to see reach as being by amplitude rather than by individual. (ID 4)*

> *…then just by word of mouth, having spoken to other trainees then they come to you and say, 'You know, I've not signed it for one of these courses but I've heard that they're really good. And I've heard that they're really worthwhile going to. So, I've decided to come along to it. (ID 29)*

Consultants highlighted that the introductory and pilot face-to-face sessions reached most current trainees when they were offered in 2019. This assertion is supported by internal attendance data which indicated that 84% of trainees attended these sessions[1]. In the last phase of the programme (2021-2022) as schools have embedded EMLeaders into normal teaching, activities have varied between regions, some schools described *'trying to reach all our trainees'* by embedding the core EMLeaders modules into compulsory Regional Teaching Days (RTD), as well as offering optional standalone full EMLeaders training days. Others offered optional full-day EMLeaders sessions, which may have reduced reach but perhaps fostered deeper engagement. Even so, for example in the Peninsula region, the reports of the faculty members suggested relatively good reach:

> *This has been delivered alongside the usual regional training. We have 50 trainees in the region… we've had between 20 and 30 on each day. (ID 11)*

Overall, however, many respondents indicated disparity in reach across different regions. The importance of universal reach, at least for the core modules, was emphasised by interviewees, because of the key importance of leadership for all EM doctors but also because not everyone considers themselves a leader. Reach of EMLeaders amongst trainees, was likely

to be supported by the acknowledged wider awareness of the programme amongst all Heads of School and across the Training Standards Committee.

Train the trainers: a challenge

Developing the consultant supervisor Communities of Practice (COP) and holding train the trainer events has been a more recent focus of the EMLeaders programme development[2], therefore, one would expect a reduced reach amongst this wider EM consultant body. It was notable that only four consultants who were not involved in developing or delivering EMLeaders, volunteered to be interviewed, reflecting the overall lower recruitment response to our wider qualitative survey amongst this group.

Spreading the word about EMLeaders more widely was considered a challenge and required considerable time investment: *'It's not easy to get people to engage'*. The consultant below illustrates how workload pressures impact upon engagement with the wider consultant body:

> *We pushed hard trying to get people from the communities of practice from hospitals across the [district]. Despite that we probably only got about 60% sign up from our departments. Some departments have put forward 2-3 people and some departments put forward no one. And you could probably guess which department because you know, they are so pressurised in terms of the workload they haven't got the numbers of consultants. We can retarget them and persuade them of the benefits, but they still might be reticent because of other demands. Therefore, it's trying to convince people of the importance of this when there's so much else going on (ID 17)*

One consultant further highlighted that these pressure disadvantaged those consultants (and hence their trainees), who were working in the smaller hospitals.

> *It tends to be the biggest centres who are able to find people to do it (Train the trainers) … some of the smaller hospitals struggle to recruit staff anyway and therefore they're battling with just staying stable and doing anything extra on top of that makes it harder (ID 29)*

As part of the 2021 new curriculum launch, EMLeaders was introduced to 200 consultant supervisors. Nevertheless, EMLeaders Faculty members described the challenge of engaging the wider consultant body who had many other competing demands. This echoes findings from our desk review which highlighted a 42% non-attendance amongst consultants registered to attend COP events.[3] Several regions described running their own train the trainer events, such the cheese and wine evenings described in
Figure 14, but two interviewees reflected, on the risk of creating an *'echo-chamber'* in these events, where a smaller number of consultants were highly engaged at the expense of wider reach. The four consultant supervisors, not involved in delivering EMLeaders, suggested a general awareness of the programme – *'I'm seeing emails about kind of getting involved in the programme'* – however, they reported primarily learning about EMLeaders as part of wider new curriculum training.

2 Phase III\IV update to strategic meeting 23.09.21

9.5.2 Reaction to EMLeaders

The reaction to EMLeaders was very positive amongst consultants. Those who had been involved with the design and the delivery of the programme describe both their own reaction to the programme and that of trainees. Two consultant supervisors describe their reaction to the 'train the trainer' exposure to the programme. The key themes identified were: *engaging for some but not for all*, *we believe in it!* and *the EM relevance is key* (see Figure 15).

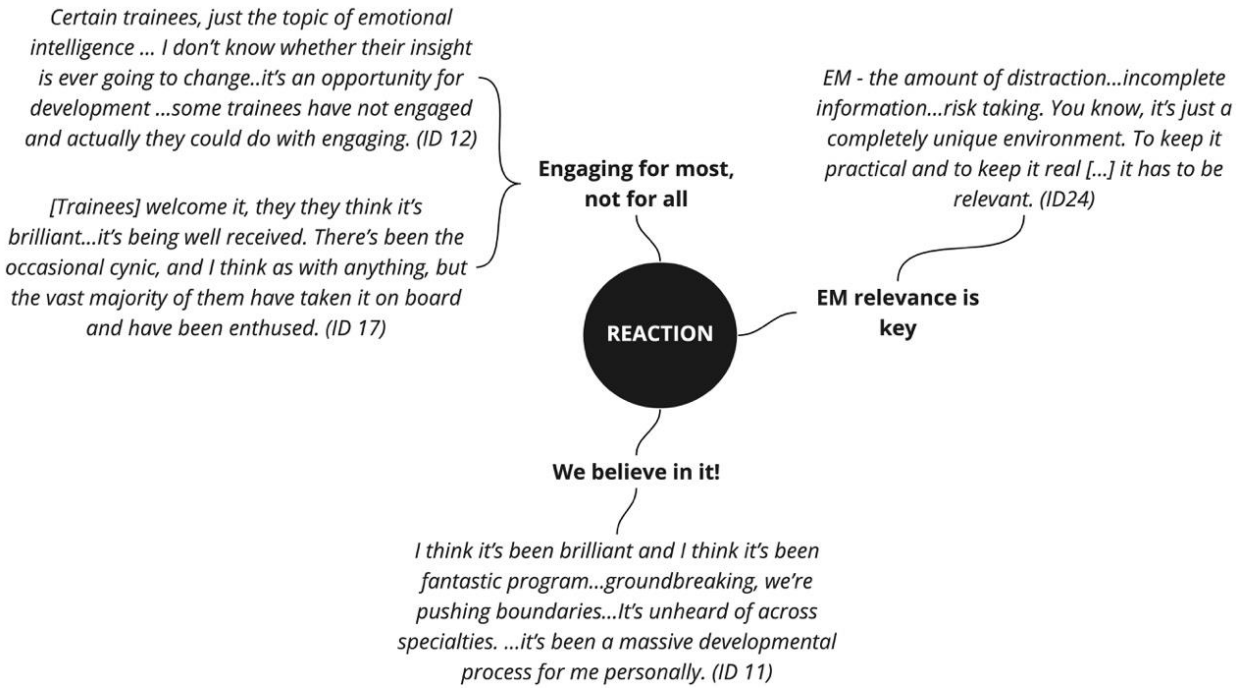


Figure 15. Reaction to EMLeaders – consultant interviews

Engaging for most, not for all

The consultants interviewed were very positive about the trainee response to EMLeaders and felt that overall, it was well received. They suggested however, that this kind of reflective group learning could be difficult for some personality types and that some junior trainees found leadership less relevant to their current role.

Consultants reported experiencing *'huge positivity'* and enthusiasm amongst the trainees, particularly the human factors elements and the opportunities to listen to and learn from experiences of current EM consultants. They reported energy in the room, lively engaging discussion and good feedback from trainees.

> *Certainly, they've been absolutely, you know, lapping it up. You know they love this sort of stuff [...] we've got some quite detailed feedback from the sessions which were open really, really positive. They take this stuff on board quite well. They're grateful for having it. I think the, you know, the reflection on that would be that the training delivery stuff has gone well and we received really good feedback (ID 11)*

A few consultants described how trainees sought and offered support to each other in the session, particularly in the face-to-face groups. This had a role both to encourage others to share issues they were having as well as offering each other support:

... someone who had had this challenging situation that moved her to tears...she was sharing...it resonated with everyone, everyone was sort of sharing and supporting. (ID7)

This softer personal development actually usually [involves being] quite vulnerable, so, to some extent having a supportive group face to face round you when you do those things is quite valuable. (ID 12)

Consultants did recognise that not everyone engaged in the same way. For some, EMLeaders was less relevant – they would attend compulsory sessions but would not *'do a deep dive'* into leadership learning and engagement was lower. Three reasons were given for this:

I. trainees were already carrying a huge burden because of their demanding training and work schedules and this programme was considered less core to training.
II. some personality types were more introverted and found the reflexive, group learning uncomfortable.
III. for some EM doctors shaping their skills to develop clinical excellence was more important to them than developing leadership excellence, each recognised by consultants as being valuable strategies to develop a diverse EM team.

Each of these reasons are illustrated below:

I can see quite a lot of the trainees who are struggling to get their exams and struggling to get their QIPS. You know, they've got a lot of burden. And then to think, 'Oh my God, and I'm going to do some leadership modules!'... not everyone's cup of tea. (ID 24)

Amongst clinicians there's some people are very oriented on the physiology, in the science and the research, and they're incredible. Some people are more interested in what we may describe as a softer skills, about people, communication, leadership. (ID 30)

It's very hard for some of the EM doctors because of our character, to expose themselves a little bit in front of so many people...takes some time for some of the juniors to get used to that and some of them will never get that (ID 17)

In addition, junior trainees were not yet in a position where they got to practice much leadership, so they could *'struggle a bit to see the relevance'.*

Consultants largely considered the move to an online presentation delivery had not had a major impact upon engagement and there were some advantages in terms of time efficiency, cost and practicality. Nevertheless, face-to-face was felt by most to be preferable, because *'we are social beasts'* and to assist the interaction between participants and course facilitators. These factors are illustrated in the quotations in Figure 16.

Figure 16

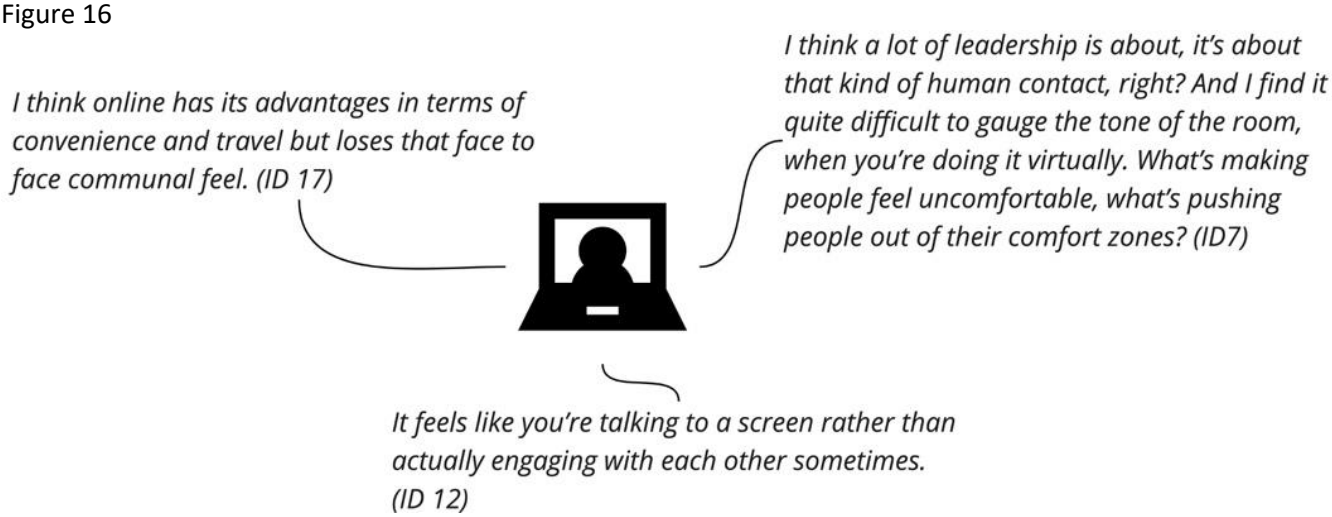


Figure 16. Quotes illustrating consultant views about online vs face-to-face delivery

Overall, the consultants interviewed agreed that EMLeaders had a positive reaction from the majority of trainees, despite the online delivery driven by COVID-19. Nevertheless, they recognised face-to-face delivery had some advantages for both their facilitation and general interaction.

We believe in it!

In terms of personal reaction to EMLeaders there was a distinction in responses between the EMLeaders faculty members and consultant supervisors who have been introduced to the programme but have not been part of the design and delivery. EM faculty consultants were enthused, positive and proud of EMLeaders. They considered it unique and ground-breaking and were confident in its value for trainees, wider organisation and their own personal development. Consultant supervisors were also positive about EMLeaders but more detached in reaction.

It was clear that leadership faculty members had benefitted significantly in terms of their own development, as a result of involvement in the co-design, the faculty development days and delivery of the programme. In particular, they highlighted the value of developing their own facilitation skills. Several commented that they wished they had had this exposure to leadership as part of their own training. This is illustrated below:

> *It's trying to upskill our trainees and also as a by product, our trainers have been upskilled, giving them a range of leadership behaviours which helped them in their personal development, but also obviously in the delivery of care on the shop floor. Everybody says who delivers it, 'If only we had this when we were training'. (ID 17)*

EM faculty consultants felt strongly that EMLeaders could help trainees in their personal development and strengthen their portfolio for progression to consultant. It was also considered necessary, as the job of EM consultant is essentially one of leadership.

> *A lot of the leadership things that we have people either do because they need to tick a box before they apply for being a consultant, or they are people interested*

in going into medical management. But, when you actually look into it, once you've done enough of it, you realise that it's actually for everybody…it's really important. That's why I thought this was a great opportunity because particularly in emergency medicine we lead a team within our department, but we also have a lot of interaction with specialties and we interact with the hospital generally. [That] ability to communicate well with people is really integral to our job… it's particularly apparent in emergency medicine. (ID 29)

Despite this demonstrable enthusiasm for EMLeaders they were also realistic, that it was the start of something good but that it was still a work in progress, with more work needing to be done in engaging all trainees and in developing awareness and support for EMLeaders amongst the wider consultant supervisor body to develop the workplace learning element:

The people who delivered it really enjoyed it. And that's evident when we have our national days when you meet all the other faculty and you know everybody is very enthusiastic about it. They do talk about the barriers…it's not all you know sun and roses, but it overall they're very positive about the content. (ID 29).

The national faculty and the support from the faculty of medical leadership and management (FMLM) was seen as integral to the success of EMLeaders and the development of leadership skills amongst the EM leadership faculty members. Support from the central FMLM consultant was highly valued as *'a unique partnership*';

I think that we all agree that we all need [the FMLM consultant] on tap whenever we need her... she is invaluable to the programme. (ID 17)

The evolution of EMLeaders from pre-pandemic face-to-face sessions, through the development of the e-modules and to embedding in regional practice appeared to be considered favourably. Amongst the leadership faculty members, the e modules were considered a good flexible resource to support face-to-face learning. Most delivering the courses referred to how they used and adapted the modules, suggesting they were a key teaching tool. They did not, however, replace the need for face-to-face learning and they recognised that e learning would not suit everyone.

I think the E modules are fabulous as a standalone resource...almost like a go to textbook to give you some background and examples and some preparatory work for the face to face, so you can probably do a little bit of the groundwork before the face to face. And then afterwards you can dip back in and engage with that work. (ID17)

I'm sure it [E learning] suits some very well and others not so well. I think I would have fallen into the camp of it being not so good for me. Some people like to think in their own...and others like to talk things through. (ID 24)

Three consultant supervisors had attended a train the trainer session and were also positive. Though their reaction was more detached, having been made aware of EMLeaders or engaged in a taster activity, rather than being immersed in it:

There's a method to it and it's interesting to hear how others approached it… there were a few things I could take away. (ID 10)

A minority of EM leadership faculty consultants who had a less favourable response (n=2), still valued EMLeaders highly. Their reaction was more personal in terms of them not yet having the confidence about leadership theory to feel comfortable to embed it in practice:

'I haven't learned them [leadership theories] to be able to stand on the shop floor and go and let's talk about [leadership theory]…I haven't gone through the leadership thing and haven't truly learned it.' (ID 13)

This highlights the need for ongoing leadership development support as new staff become engaged with embedding EMLeaders in the regions going forward.

EM Relevance is key and evolving

Consultants universally felt that the EM specificity of EMLeaders was vital and gave the programme more relevance than generic leadership training. There were several reasons given for the unique nature of EM, such as the intensity of the work environment, the level of risk, complexity of decision-making and large diverse team structure.

In addition, consultants described EM doctors as practical people who '*work at pace'.* They felt that being able to support leadership theory with context and examples that were directly relevant to and actionable on the shop floor was necessary to make the training real and relevant, which was vital for uptake amongst trainees. These factors are illustrated below and in Figure 17.

Everyone knows their own speciality best. It makes it much more real life for the trainees like hearing it from local team members, I think. (ID11)

.....generic leadership is too distant, too theoretical, too abstract and it's hard to link what you learn from there [to take] into your everyday shop floor work [on a] Friday night when the ED is humming! Placing it in the context of emergency medicine makes it so much more accessible, more relevant. (ID 17)

I think as far as I'm aware, this is the first and only specialty specific leadership course and you know that's quite interesting because it focuses on how that is applicable within a specialty and that makes it more relevant I think. So, sometimes doctors coming into leadership training I think well this isn't that relevant to what I'm doing. But when you apply it to a very specific speciality then it becomes more real and I think the take up from the trainees is improved. (ID 29)

The EM educators were described as crucial to bring the theoretical material to life and presented a unique opportunity for trainees to develop themselves by interacting and learning from their consultants by listening to their stories. Without this *'apprenticeship like approach'* consultants doubted the efficacy of EMLeaders.

What they want to hear is consultants talking about their experiences of those topics, not about the topics themselves. It has to be relevant and experiential, you know... What it [EMLeaders]is offering is the opportunity to engage with consultants who wants to talk about this sort of stuff. If [it] is one of the ambitions of the program and that is that is being delivered like this, then I think it will help the trainee out. If it's just you have to do these modules online and hopefully get something out of it without that as an apprenticeship like

approach, then I think it's going to be very dry and very uninspiring and maybe not affect people in the same way. (ID 12)

As the programme is being embedded in the regions, EM faculty consultants described different ways in which they were further increasing the EM relevance of the modules. Some described taking the theoretical concepts and developing their own materials and presentation with specific EM context – for example, in *'mini podcast'* discussion between two consultants, or just taking a particular model, or theoretical element of an e module and relating it directly to EM in a short session. There was a sense that further increasing the EM relevance would be beneficial:

For our trainees to engage and take it forwards, we've been trying to make it relevant to emergency medicine to our arena, to our environment… that's the challenge for us as educators. So, it's not a criticism of the material but the delivery and the way we put it across actually has to be quite different from the package that's on the EMLeaders programme. (ID12)

Some consultants had ideas to develop the modules in response to their experience of teaching them. It may be beneficial for these views to be collated and fed back into the module development to refresh the content.

9.5.3 Learning from EMLeaders

Leadership faculty consultants described tangible learning from their involvement with EMLeaders both in terms of their leadership knowledge and development of facilitative skills. The consultant supervisors who had engaged in train the trainer events did not elaborate on their learning, beyond simply learning what modules were available and where to find resources. The themes identified with the learning framework were *'A leadership journey'* and *'The power of human factors'*

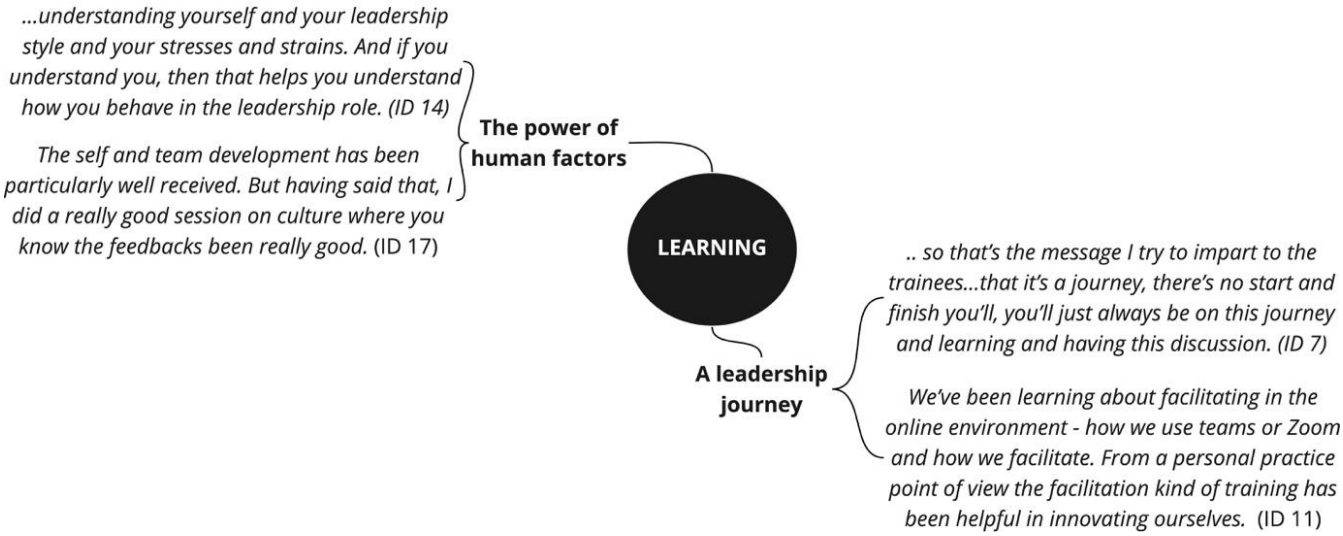


Figure 17. Learning from EMLeaders – consultant interviews

A leadership journey

Leadership faculty consultants engaged with the development of EMLeaders, describe their involvement with the programme as a largely beneficial personal journey, building resilience, time-management skills and self-awareness, and positively influencing their professional and

personal life. There was a clear sense that learning about leadership did not end and also that the process of developing leadership expertise within EM was at early stages.

One of the course developers described the co-design process of EMLeaders, as a leadership journey in itself: *'a collective journey towards something'* and the FMLM educator interviewed, cited *'eureka moments'* being evidence of learning amongst the faculty consultants. For example, learning that *'a good leader helps others to flourish'* was described as a key point in the development of the faculty team who at first worried they did not have enough leadership knowledge to teach it: '*something clicked in their head*' and they were tangibly more confident. The consultants themselves described their own leadership development also in terms of a journey and a process, *'another step in my journey'. '[I'm] still learning lots, the content is really good, you also learn lots just by speaking to the trainees',* but also that this was how they portrayed leadership to the trainees also.

> *So, that's the message I try to impart to the trainees…that it's a journey. There's no start and finish. You'll just always be on this journey and learning and having lots of discussion. (ID 7)*

Part of the journey for the leadership faculty consultants, was also around developing the academic and theoretical knowledge to support leadership teaching. Exposure to EMLeaders had clearly given most of the faculty members, the confidence to be able to teach leadership. Consultants talked also about learning to be more comfortable with silence and facilitating reflection. Online facilitation was also acknowledged as a unique skill for which the consultants said they were well-prepared through development days: *'we have really developed our skill set'* (see also Figure 17).

Despite, considerable perceived leadership growth and development for most, one or two consultants suggested they were still at the beginning of developing their leadership expertise.

> *It's providing a framework for the theory behind leadership, which is good. Do I feel confident to do it? Probably not! (ID 14)*

> *I think for me the journey is only just starting! (ID 13)*

For the specialty in general, consultants were aware that developing leadership expertise was still early in its evolution.

> *We have started the journey and I think now it's about developing the language, the expertise.*
> *(ID 17)*

The power of human factors

As part of the discussion about learning outcomes from EMLeaders, the consultants also reflected upon which modules were most impactful for both themselves and the trainees. Overall, the balance across the nine modules was considered good to satisfy the needs and interests of different people: *'there'll be elements that will resonate with a number of individuals'. O*f notable value, however, according to consultants the most beneficial were the self, teams and culture modules (see Figure 17). From their own perspective they talked about these modules as the most impactful, encouraging them to think and reflect on their own

practice and the value of learning practical useful skills. The most pertinent learning included:

- the importance of culture and *'how leaders set the tone'*
- personal learning around resilience, time-management and looking after yourself
- types of leadership style – *'what type of leader you want to be'*
- conflict resolution
- the importance of civility and compassion when you are leading under pressure

Similarly, in terms of their perception of trainees, conflict resolution, communication styles and the influence of the individual in shaping culture were described as well received and generating lots of thoughtful discussion. Consultants (and trainees) talked at length about a persistent challenge and conflict point being referring patients from the ED into other specialties. The consultants highlighted how learning practical techniques to manage conflict, learning about compromise and negotiation was likely to be particularly well-remembered and useful for trainees.

> *That sort of conflict type thing is very applicable to specialty engagement. We talked about things like conflict versus negotiation… to smooth understanding …to achieve a common goal (ID 28)*

> *In some of the earlier modules we talk about things like working as a team, how you deal with conflict and because the trainees are predominantly doing clinical work, it tends to lend itself to talk about those circumstances where you're working clinically and you are working as a team in that environment; we work with specialties who are often quite busy and they have different pressures and inevitably [it] occasionally creates some conflict. So, they tend to be the things that people remember, it , is very applicable to sort of a specialty engagement where there's, difference of opinion. So, the [skills] that are applicable, rather than the softer skills. (ID 29)*

In summary, the data highlighted examples of concrete learning for both consultants and trainees as a result of exposure to EMLeaders.

9.5.4 EMLeaders and its influence on behaviour

The consultants interviewed found it difficult to pinpoint definitively the impact of EMLeaders on behaviour, amongst many other influences. Nevertheless, they felt that the programme had helped shape them as leaders. The responses from the leadership faculty centred upon behaviour related to personal factors such as compassion and balance, their teaching and supervisory behaviour and how this influenced trainee development. Consultant supervisors on the other hand described how the train-the-trainer EMLeader events provided them with a framework that helped support positive supervisory behaviours specifically. The two themes identified were *Shaping better, balanced, compassionate leaders* and *Scaffolding for supervisors* (see Figure 18).

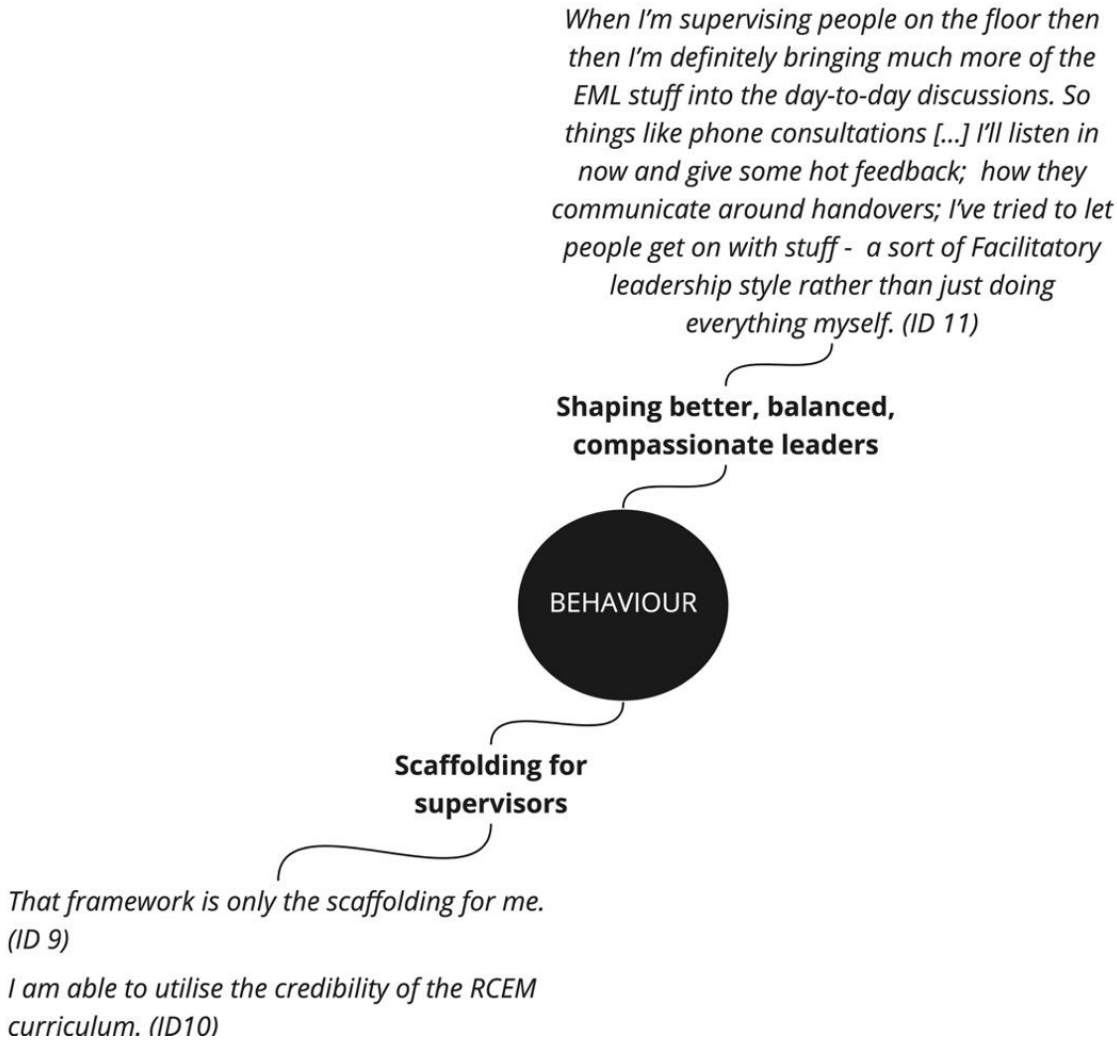


Figure 18. Influence of EMLeaders on behaviour - consultant interviews

Shaping better, balanced, compassionate leaders

Despite finding it difficult to articulate specific ways EMLeaders had changed their behaviour, the leadership faculty consultants were confident that it had positively shaped them as leaders and that EMLeaders would ultimately benefit trainees.

> *I think it's very difficult to measure the outcome, so I can't see how you can have an objective measure of success of the EMLeaders programme...but I know for certain that I am more balanced, more measured, more considered. (ID 11)*

Consultants described positive changes in their own self-care behaviours, as well as changes to the way they role modelled leadership behaviour, bringing the leadership language into shopfloor discussions with trainees, giving *'hot feedback'* and adopting a more facilitative style of management. Their responses suggested that elements of EMLeaders had influenced daily practice.

> *In terms of my shop floor behaviours, I am convinced I can lead better and role model better. I have a greater awareness of culture. It [EMLeaders] does, undoubtedly, improve you as a leader in a generic sense. (ID 17)*

I do keep a diary and do a gratitude list most days. I find that really helpful. Especially after a tough weekend, I do the breakdown in steps of, what did I do well? what could I do better? The time management matrix, I use that a lot. There [are] so many elements that I use on a daily basis. (ID 7)

In terms of their personal resilience the consultants reported using some of the reflective tools from EMLeaders and being kinder to themselves. In the example below the participant describes how useful it was in this respect, to understand different personality and leadership types:

I give myself a bit more of a break and that understanding that people have different leadership styles and different personality types and respond to situations differently and that not necessarily one is wrong or one is right. It's just different. And if you have an area of weakness in one aspect, you'll probably have a strength in something else! So, Leadership comes in many forms, and they'll be areas that you're comfortable and ones that you're not comfortable with. It's about not beating yourself up about that. (ID 14)

They reflected that involvement with EMLeaders had positively impacted upon their interactions with others. For example, several consultants reflected on the fact that they now used communication techniques more strategically to resolve conflict, show empathy and lead in a more facilitative and less directive way. Once consultant linked the advanced communication skills he had learnt, to his improved ability to manage complaints effectively:

Advanced communication skills – things like structuring empathy, structuring compassion. I have tried to structure things when I'm meeting with [a] complainant, you know, 'this is going to be a compassionate meeting' - you don't have to necessarily be empathic towards a complainant, but you know, to acknowledge it and make an effort to be compassionate or show empathy is actually really important. (ID 12)

They also expressed they were more aware of the impact of individual behaviour on wider culture, and considered how they communicated and behaved accordingly.

Practical teaching skills developed through involvement with EMLeaders meant they felt they prepared and taught leadership in a more effective manner and that they were able to transition effectively to online teaching. This included practical use of online technology, facilitating group work, using silence effectively, stimulating discussion, as well as preparing more thoroughly:

'Being taught how to facilitate properly is that you really need to do a lot of preparation and be on top of your game for the delivery, whether that's face-to-face or online. You know you can't wing this and therefore the delivery takes a lot of time to prepare... a significant number of hours and days and meetings and discussions to make sure that everybody is on board and knows what's coming.' (ID 17)

Ultimately, the positive changes in both personal thought patterns and overt behaviour were considered by most respondents to be likely to positively influence trainees:

I'm a better leader, having been involved [in EMLeaders] and undoubtedly, I am better able to support the trainees, so the trainees are benefiting as well. Better leadership spills [over] to trainees by example. I think I see [generic improvement of leadership] with our middle grade to senior grade trainees in terms of the way that they understand the system and the way that they behave. It may be a little harder to see in the juniors who are more service delivery. But personally, and I think you know anecdotally from speaking to my colleagues we have all benefitted from this range of leadership behaviours. (ID 17)

Scaffolding for supervisors

Three consultant supervisors had engaged only with EMLeaders through train the trainer events. These individuals did not communicate the same level of behaviour change as a result of their exposure so far, to the programme. The EMLeaders framework was described by one of these consultants as *'scaffolding';* it gave the consultant supervisors a frame of reference which was helpful in order to structure their supervision and give theoretical reinforcement to some of the things they were doing already. They felt that the backing of the RCEM leadership curriculum (rather than EMLeaders specifically) gave their leadership advice credibility (see Figure 18).

One consultant also described being reassured to hear at a train the trainer event that he was supervising in a similar way to others. The only shift in behaviour reported by this small group of participants was a shift to be more facilitative in their supervisory style:

[It has helped me in] … getting people on the same page. It's a process managing trainees in difficulty, struggling trainees. (ID 10)

[I encourage my trainee] to find the solutions on his own…to swim better. (ID 9)

One recently promoted consultant had experienced EMLeaders as a trainee. He was extremely positive about how the programme, alongside workplace training had prepared him for his new role:

It gives you time to think about it. It gives you time to think about kind of what makes [name] a leader? Or, how could I be a more effective compassionate leader to the to the to the teams that I'm leading at a micro level? It definitely has been part of my journey. I definitely think it helps confidence or maybe it just helps you to understand about what you're doing and how you're doing it. (ID 30)

This extract above is indicative of the likelihood that leadership development is likely to impact on the organisation slowly, over time, as existing trainees become consultants. This is further explored in the theme *A subtle positive shift, not a quick fix* in the next section.

9.5.5 Results and Impact for the organisation from EMLeaders

The consultants interviewed were positive about the potential long-term benefits of EMLeaders, while also reflecting that it may be many years before tangible changes in culture are evident, as the current trainees progress to become consultants themselves. They suggested this was partly due to the tremendous stress the NHS is currently under. In the short-term EMLeaders could help EM doctors cope. In the long-term it had potential to

improve the culture of the working environment and to create a workforce of more compassionate effective leaders. The two themes here were: *'The system is broken'* and *'A subtle positive shift, not a quick fix'* (see Figure 19).

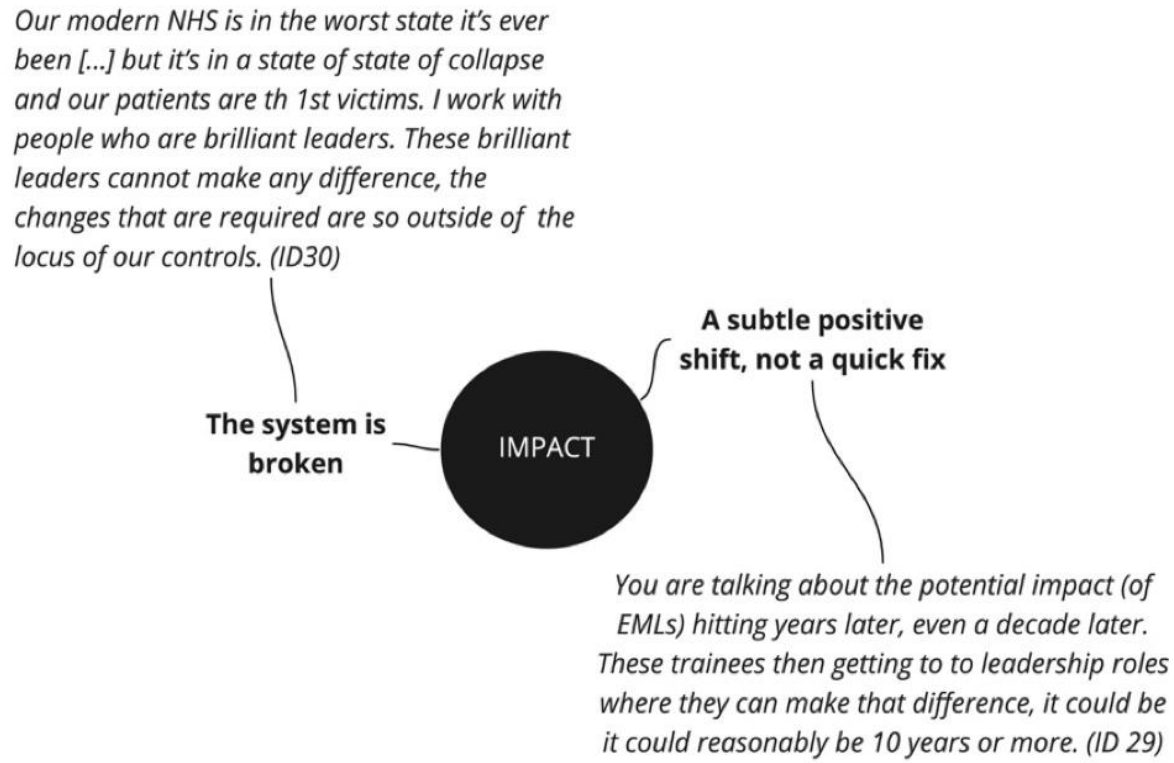


Figure 19. Impact of EMLeaders - consultant interviews

The system is broken

Universally, consultants highlighted the very challenging NHS environment and the intense pressures within the current EM working environment. They felt that this limited the extent to which EMLeaders could impact upon retention and resilience of trainees and upon the wider organisation. The NHS was described as *'in crisis'*, with issues like low morale, burnout, staffing shortages, intense pressure and structural problems, all creating a very difficult working environment (see also Figure 19).

> *The NHS as a whole is under a lot of pressure [...] there's alot of burnout in the NHS, lots of people leaving jobs, loss of morale, fatigue. There's a lot of sort of negativity at the moment and it's difficult to turn that round...it's not likely to be a quick switch. (ID 29).*

In addition, consultants also highlighted how this was negatively impacting upon the EM trainees in general and upon retention in the specialty. These factors are illustrated below.

> *It's relentless. I mean, you turn up to work and you just flat out until the end of the shift and then you go home and so, they do get a bit exhausted by it by all of this. (ID29)*

> *I think most people have really struggled in emergency medicine this winter and it really placed demands on your resilience. (ID 17)*

There is an emergency medicine retention crisis. A lot of the pressure is related to kind of external things like waiting times. (ID 08)

Within this context, leadership training alone could not be expected to be enough to materially change this. At best, EMLeaders was felt to offer potential to understand oneself better and the sessions gave an opportunity for the trainees to support each other.

It is not going to fix intensity of work rotas...any of the really important things they [trainees] actually do. Does it improve their well-being?...no. no I don't think so. I think intellectually understanding yourself [and] your responses to things is good for your own personal development, but it's not going to make you better to manage 25 people in ambulances, people in a queue waiting an hour to be seen and a doctor calling in sick. It should make you a better clinician but in reference to resilience it is just as shirking the main problem. (ID 14)

I think part of leadership is you know, dealing with adversity and it's really has been a sort of, it sounds trite and meaningless, but it has really been a difficult time for our trainees and part of leadership is talking about that and how they manage that. (ID 24).

Elements of the Leading Self module particularly, were highlighted in helping develop personal coping strategies. This included improving understanding of oneself and what was personally needed to recharge: *'resetting, reorientating yourself':*

We got the trainees to just think about the elements are that up their reserve tank, and its different for different people – for some its exercise, for some its quiet time […] so, I just think it will help, especially now it's just so pressurised' (ID 07).

Ultimately, the consultants felt EMLeaders could give doctors practical tools to their coping strategies, in what was acknowledged as a very difficult working environment.

A subtle positive shift, not a quick fix

In the context of the challenges of the current NHS working environment, EMLeaders was not seen as a quick fix. Nevertheless, it was described as an important positive step in the right direction by most of the consultants interviewed.

Consultants considered that EMLeaders was successfully creating leaders for the future from the bottom up, but realistically they felt it could be many years before the cultural shift was evident, and even then, it may be hard to measure (See Figure 19). The value of EMLeaders was in having conversations about leadership early on in EM Doctors' careers and getting the trainees to see themselves as leaders early on, ultimately this would translate into departments being better led in the future but this may be *'even a decade later'.*

Capturing the trainees that are very early on in their training [...] opening up this leadership conversation beyond the consultant level ...it was quite profound for them to hear that I see them as leaders. They still see leadership as the realm of authority or seniority, which clearly it's not. (ID 7)

Having excellent leadership will mean that our departments will run more effectively and better. (ID 30)

The positive impact from EMLeaders was seen to derive from two aspects. The first that trainees were better skilled to do their jobs and the second, to transition to consultant: to communicate effectively, cope with stress and pressure, be better equipped to take on leadership and general management roles, be more realistic and positive about developing quality improvement initiatives and better at coping with change.

One of the great strengths of the course is the development of self-awareness, it gives you a little bit more resilience and a little bit a more able to cope with the pressures that you you're under and in a shop floor leadership role. (ID 17)

There's a lot of my job where I'm doing meetings and doing various other projects and then there's the clinical side. It's important to learn both sides but there's not always a lot of emphasis on all the other things that you inevitably end up doing as a consultant. And it's often you sort of just thrust into it. (ID 29)

A few consultants noted that this was a great improvement upon their own training. Something, which motivated involvement with EMLeaders from early days:

I'd taken on some quite meaty leadership roles without any experience, and I didn't want people to go through the same experience. (ID 14).

Secondly, the leadership faculty consultants particularly considered that improved communication, culture, self-awareness and understanding of different personality types would significantly improve the nature of the working environment. The consultant below described how his behaviour and that of his trainees was slowly exerting a positive influence upon workplace culture, as a result of EMLeaders:

'I think I see that with our middle grade to senior trainees in terms of the way that they understand the system and the way that they behave. Undoubtedly, we all benefited from this range of leadership behaviours. The people are my institution are certainly more balanced, more measured, less reactionary, less frustrated....you see less of the reactionary bad behaviour which can be quite disruptive.' (ID 17)

So, whether someone is a good doctor or not. It's often the non-technical skills. It's not the ability to recognize a heart attack or the ability to manage a stroke. It will be how they communicate with their peers, how they lead. (ID14)

Despite generally being positive about the potential long-term impact of EMLeaders, consultants did also highlight that *'the journey is only starting'* and that there was still much work to be done to get the programme embedded in normal practice, in order to sustain the progress. The key recommendations from consultants for the future are summarised in table 10 page 88.

9.6 Key themes from the trainee interviews

The themes from the trainee interviews are also summarised by the key Kirkpatrick frames (See Figure 13 for an overview). The data include an interview with one SAS doctor who had also accessed elements of EMLeaders and comments from one new consultant who had experienced the programme recently, as part of his training.

9.6.1 Reach

Diversity of experience

It was evident from the collective descriptions of EMLeaders amongst trainees that there was some diversity in reach and diversity of experience amongst trainees. Some trainees had experienced full leadership training days and others just one hour leadership teaching that was offered as part of the compulsory regional training days. EMLeaders appeared to have good reach amongst most of the trainees with most of the regions having at least some sessions within their RTDs. Two participants had only experienced the initial pilot sessions. For one of these, this was likely to be because he had moved out of England, to Wales temporarily, so falling outside the HEE jurisdiction. The latter participant, as an ST3, was largely unaware of recent EMLeaders activity and was not aware of the e modules. This experience ties in with the description of the leadership faculty consultant from the same region, who felt that they had not been successful at embedding the programme into practice. This highlights potential inequities in exposure to EMLeaders across trainees. In addition, there was variation in exposure to the e-learning modules with some working through all the modules and a smaller number being largely unaware of the EMLeaders e-learning offering.

9.6.2 Reaction to EMLeaders amongst trainees

Trainee reaction to EMLeaders was positive overall, though mixed. The pilot face-to-face sessions were in the main, well received. There were elements of the current virtual delivery which trainees struggled with. This seemed to vary somewhat across region and by acknowledged personal preferences (some for example preferring self-directed learning and others wanting group interactive leadership training). One SAS doctor was interviewed; this participant had experienced elements of EMLeaders but not the full programme and was in general not in favour of leadership training per se.

The themes identified relating to Reaction were: *'There is value in being together in a room'*; E modules: *no-one is cruising through it!'*; *'Good leadership training but it could be improved further'.*

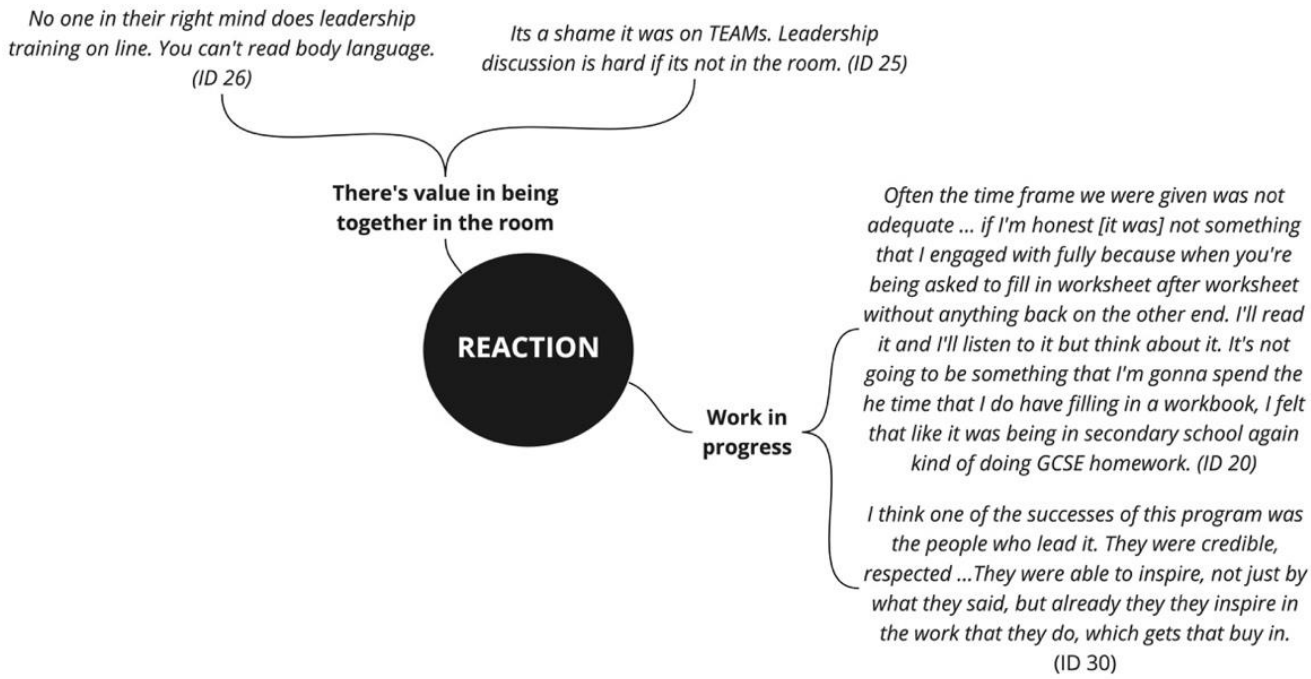


Figure 20. Reaction to EMLeaders - trainee interviews

There is value in being together in a room

Most trainees suggested that virtual delivery compromised their experience of EMLeaders to some degree and a minority were cynical about teaching leadership remotely (see Figure 20); almost all interviewed wanted at least some of the delivery to be physically face-to-face. The facets of EMLeaders that were particularly valued as face-to-face included the opportunity for casual social interaction, finding it easier to focus and embed the learning, having the opportunity for more practical sessions and the mind set shift that comes with being physically away from your normal environment. In particular, the value of group discursive elements of the training was felt by most to be limited by not being physically together. Participants talked about the discussion being *'more stifled',* often dominated by a few vocal individuals and it being difficult to read body language.

> *It doesn't lend itself to being online…it's never quite the same as doing it in person. It's very easy to not engage very much when you sat there on the screen. I think if you sat around the table, it's a bit more difficult. It's very easy when there's a group of five of you online for one or two people to talk or you all sit there in silence because it's easier to do so. And so, whether or not you're gaining as much out of it necessarily in these little TEAMs breakout rooms. I don't know! (ID 22)*

The worst situation was the hybrid set-up with some attending face-to-face and some online. This was because it was challenging to hear and engage in the conversations that were happening in the room when you were attending virtually.

> *...those leadership discussions, if you're watching from home, you tend not to engage with, because it's fast, it's very difficult to hear what everybody saying to each other in the room... I find it doesn't work so well over the Internet. I think if you're if you're in the room, you probably get a lot out of it (ID25)*

Trainees did acknowledge that they fully appreciated the need for online delivery during the pandemic. They felt that the facilitators had done a great job considering the situation. It was just that most hoped going forward that at least some physical face-to-face sessions would be restored.

> *I think the topics are quite difficult to teach because there's lots of abstract concepts. And I think the three people who do the sessions in our region are really good…they're very charismatic [but] in face-to-face sessions, they're much better than in the virtual sessions. Obviously, we're on the virtual [platforms] people don't interact with each other, the trainees don't interact with each other. So, you can have conversations about leadership styles and etc, which don't sort of germinate. I think I would prefer them to all be face to face if it's going to continue as a mandatory thing, rather than accepting that some can be virtual. (ID 5)*

It was only a minority (2 individuals) who were completely comfortable with a full delivery of EMLeaders virtually. The main reason given being that they felt personal discussion was more relaxed when remote. For most, even if they felt the delivery lost nothing being online, there was a reflection that participants still missed out on the camaraderie of being together in a room:

> *It's an easy environment to open up in and be honest in. F2F was a bit more formal. It feels more relaxed on line (ID23)*

> *You still engage in the same way [virtually] people were well engaged compared to some training but it's nice to be in the room with consultants. You miss out on the patter, which is quite valuable. The content doesn't change but you lose the camaraderie. (ID 24)*

The time commitment and inconvenience of attending physical meetings was acknowledged. Overall, however individuals suggested that when you made the effort to attend in person it shifted the mindset and having put the time aside were likely to be more fully engaged.

> *The other challenge with the virtual sessions is the value of time is changed. I'm not sure in such a good way, because when you have to go somewhere and make time, there's a real investment. When it's virtual that making it time to fit more in is easier... for example I thought alright, I'll be 5 minutes late to the virtual session while I finish making tea for my son! It's about picking the right forum, for the right thing.... definitely having face-to-face time is really important. Make it a day, half a day, but protected away from the hospitals. (ID 30)*

Those who attended the pre-Covid-19 face-to-face pilot and introductory EMLeaders sessions were extremely positive about the whole experience, particularly being in a hotel setting which demonstrated *'deanery buy in'*, and was more impactful, being away from the hospital setting. When face-to-face sessions had previously been attended, such as the initial pilot days, individuals who had had this experience reflected that it could help the virtual environment ''*flourish'* more easily: 'i*t helped the virtual day have purpose.'* This suggests that some social capital was gained from the initial in-person sessions and that mixing face-to-face and virtual sessions may improve the reaction to virtual sessions.

Trainees did reflect that in the post-pandemic reality, attending face-to-face for every session may not be practical, because the ease and time-effectiveness of working virtually was evident. Most, however, wanted some face-to-face delivery for EMLeaders to resume.

Work in progress

Trainees universally felt it was important and useful to have leadership training as part of the curriculum. They felt it was a vital skill they needed and that it was good to receive leadership support throughout the EM training period. In terms of the academic content, reaction to EMLeaders was on the whole positive but was mixed; there were elements of the e learning that many trainees struggled with. In addition, some questioned the efficacy of leadership training without practical team building, and experiential leadership scenarios.

Most really valued the commitment and professionalism of the facilitators and they broadly liked the organisation of the modules. Including EMLeaders in regional training and streamlining the content and curriculum was valued and an improvement from the initial sessions. In addition, they did feel it was important and necessary that it was delivered and contextually focused specifically with emergency medicine in mind. These positive aspects are summarised with data in Figure 21.

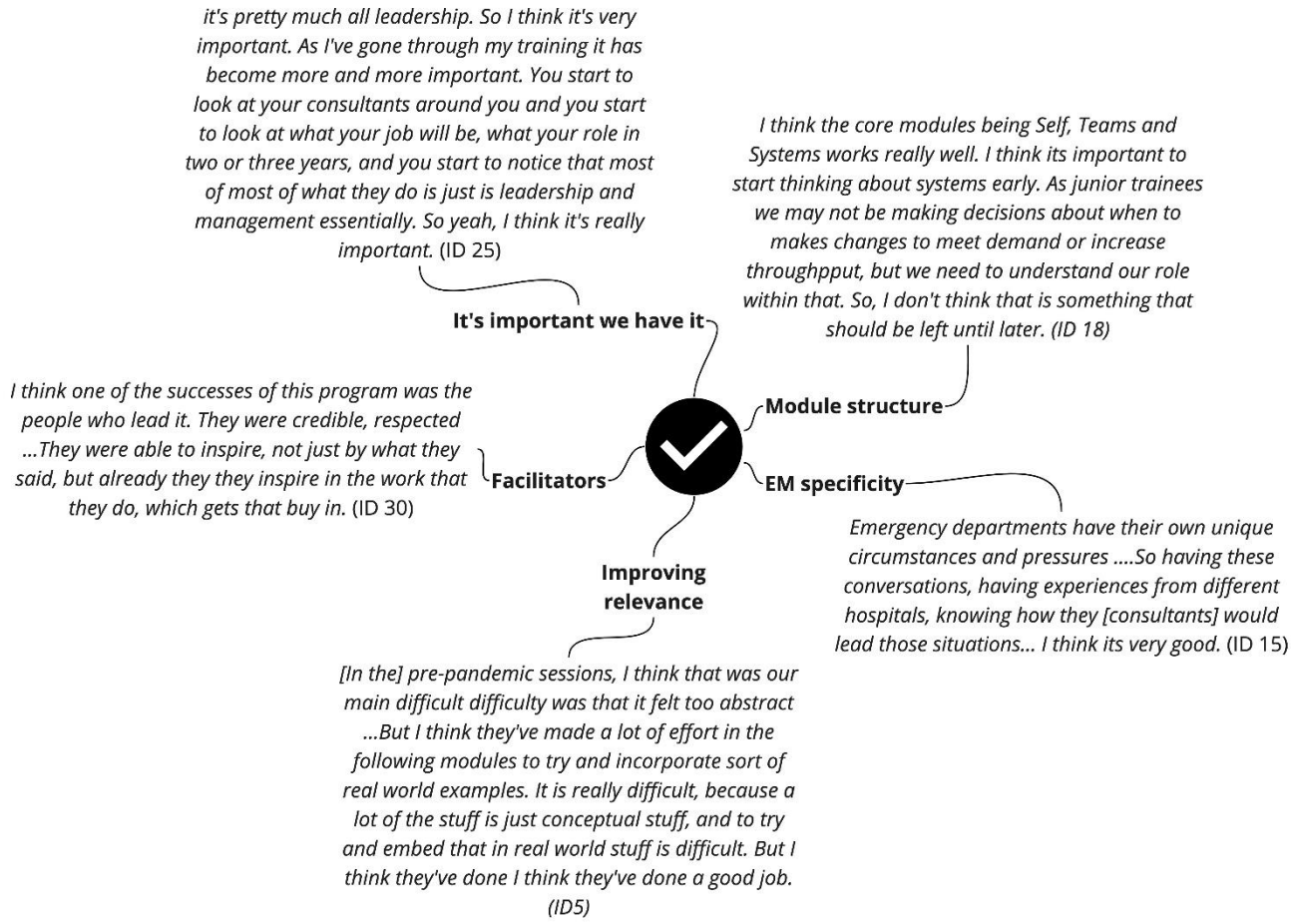


Figure 21. Positive reactions to EMLeaders amongst trainees

There were mixed reactions, however. Several trainees were critical of the burden and the likely effectiveness of e-learning for leadership. In addition, they felt that increasing practical experiential teaching, within the safe space of training would improve their EMLeaders experience. Finally, there was some diversity in the perception of EMLeaders as a stand-alone leadership programme. Each of these is discussed further below.

Trainee response to the e modules varied considerably. Two trainees found them very useful and were really engaged with completing them. The majority found them informative and helpful but criticized the amount of time they were given to complete them. Some found the burden of completing them almost untenable: *'it's simply too much'* '*overwhelming'*:

> *It's nine modules of four hours …it's a huge amount of time and pressure – So, every training day we do, they've moved on to the next one… I've not met any trainee who's cruising though it and completely up to date and is ready for the training day every time it comes…its way too fast for me. (ID 25)*

In addition, many found the reflection exercises unrewarding, because it was a lot of work *'without getting much back'* in the e learning design, or because they rallied against written reflection in general, as indicated by the participant below:

> *I've never liked written down reflection. I've done my own education modules, and I've got my own things. And they spend the whole time saying that reflection is really important, and it's really personalised but then in that case, then it shouldn't be marked in my opinion or written down if you choose not to. I really hate it. I think you can be encouraged to reflect and I do think that's really important. But the idea of making reflection mandatory defeats the point in my opinion. Because people reflect in different ways. I don't write stuff down, but I'll go away. I think about it for a few days. I'll make my mind up, you know, or I'll speak to someone about it. I'm not very good at writing, and I don't enjoy the process of it [and] I don't like sharing it with people that I don't want to share it with. (ID 16)*

A minority were overtly critical about the relevance and usefulness of learning about leadership via self-directed e-learning at all.

> *I don't think it's the right approach personally. And I know from colleagues one hates doing e learning for all the mandatory training that we have to do, and if it's sent out, I can tell people just skip through the answers just certificate at the end doesn't have the same impact as much as we'd love it to. It just doesn't have the same impact that face to face training does. (ID 26)*

A small number of trainees were not aware of the e modules and had not completed any. Some of the views and experiences of e modules are summarised in Figure 22.

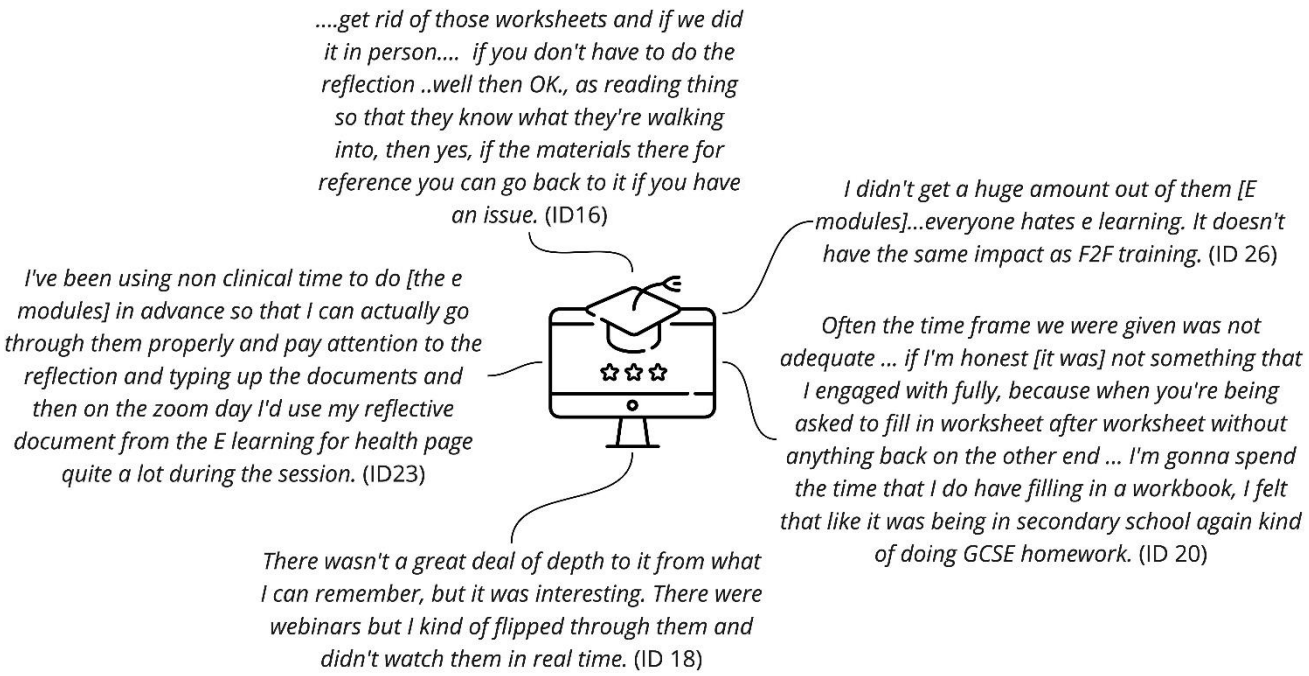


Figure 22. Quotes illustrating a mixed response to the e modules amongst trainees

Having interviewed both consultants and trainees there was some disparity as to how each party viewed the role of the e modules. In contrast to the trainees, faculty consultants, in general, saw the e modules as a useful supporting resource rather than integral to the training and did not discuss the workload associated with completing them. In most regions they suggested the e modules should be digested before EMLeaders training sessions. This allowed facilitators to make the most of shorter slots within RTDs, where they could focus on bring the theory to life with real life examples. In some regions time was allocated to completing the modules within EMLeader training days, which trainees interviewed said was an improvement, although not a substitute for face-to-face teaching: *'it's not embedded, it's not experiential, it's passive'*. The data suggest that whilst the e modules are undoubtably a useful resource, there is a limit to the number that can reasonably be completed within the training year and that they are not a substitute for teaching the theoretical element of EMLeaders.

In terms of teaching leadership several trainees felt EMLeaders was missing a more experiential element, where you could develop and practice your leadership in non-clinical scenarios and get robust feedback from peers and facilitators, in a safe training environment.

> *I think it would have been nice if they had been able to do a bit more scenario based… where you've got a task and you have to complete that task, exercises which aren't anything to do with medicine and be able to get more robust feedback. I think it is a quite useful to recognise what you do as you get more stressed and as you add more levels of complexity and things, and with your you know as your bandwidth is taken. (ID 21)*

> *I would do a residential course where people are immersed in small groups and have to put into practice leadership and learn the value of being a team member and listening as well as leading (ID 26)*

Most trainees were not aware of the intention to reinforce EMLeaders teaching with workplace learning and there was no obvious synergy between EMLeaders teaching and workplace supervision which led some trainees to be more cynical about the programme.

> *I don't think any amount of clicking through stuff on your computer would set you up for being left there at 1:00 o'clock in the morning running a night shift (ID 22)*

> *I think that teaching the theory and not practicing it is not the way to teach it….you can't teach this sort of stuff over a lecture. And that you need to practice it and have good role models and see good leadership to become it… (ID 26)*

Finally, it was evident from the different trainee accounts of their experiences of EMLeaders, not everyone perceived it as a programme, in the sense of a planned series of courses with an overall objective. This was likely to be at least in part, because it was virtual and embedded in normal teaching. This compared unfavourably with some other leadership development courses trainees had attended. The participant below sums this up:

> *It feels like a couple of afternoon sessions we've had to discuss some kind of topics that don't quite fit into my clinical framework. It doesn't feel like a programme at all. Maybe if it had been delivered the way it was intended it would? I don't know! (ID 20)*

Overall, reaction to EMLeaders was in the main positive and trainees valued it but there was also a sense that elements of it needed further work and refinement.

9.6.3 Learning from EMLeaders

This section relates to the main learning outcomes that were to be achieved within EMLeaders. Specifically, questions were asked about what information had been absorbed, what parts of the training were meaningful, whether or not the intended knowledge and skills were acquired and the impact of workplace leadership learning. There were five key themes in this section: *'The power of human factors', 'Putting things in boxes', 'The storytelling of leadership', 'The value of workplace learning' and 'seeking wider leadership support'*. The data are summarised in Figure 23.

All trainees recognised the need to develop leadership skills during their training period, given the integral part leadership plays in the role of an EM doctor. For most it was evident that elements of learning from EMLeaders had helped them in some aspect of that development. Trainees had clearly also learnt about leadership from other courses and from less formalised workplace experiences. The key parts of EMLeaders that appeared to have been absorbed and to have made an impact upon trainees were the human factors[4] elements of the programme, listening to the leadership experiences of those more senior: *'the storytelling of leadership'* and how EMLeaders added useful theoretical and practical context, helping trainees make sense of the systems and people around them. EMLeaders was described as providing the learning for a foundation for developing as a leader: *'a solid basis of things that sort of lay a groundwork',* however, seeking wider leadership development support was also

[4] *The principles and practices of Human Factors focus on optimising human performance through better understanding the behaviour of individuals, their interactions with each other and with their environment (Source: Human factors in healthcare, NHS England)*

reported. In addition, trainees valued workplace leadership learning and would appreciate this being more accessible and formalised.

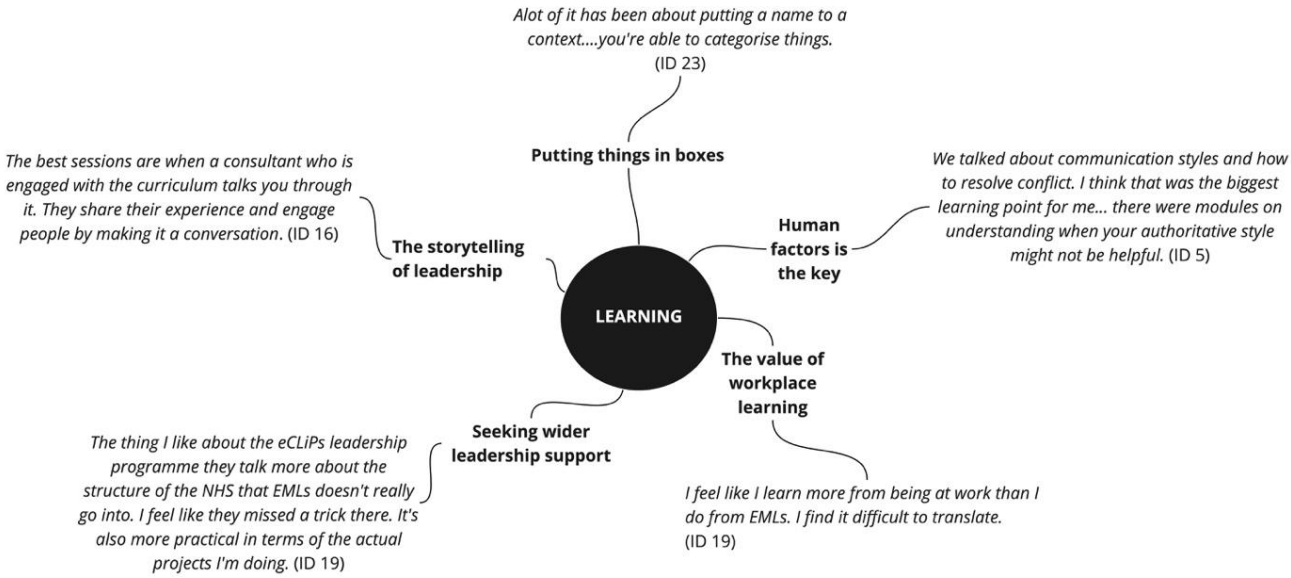


Figure 23. Learning from EMLeaders - trainee interviews

The power of human factors

Undoubtedly, the most recalled and perceived useful learning was associated with elements of the human factors training, as the consultant interviews suggested would be the case. Being aware of different communication strategies, recognising different personality types, understanding the appropriateness of different leadership styles in different situation and learning about negotiation and compromise were particularly highlighted as being key take-outs from the training sessions. Most trainees picked up on learning more about communication styles and many also reflected upon the empowering nature of developing greater self-awareness from engagement with EMLeaders:

> *How I interact, conflict, how I support a junior...has been useful learning for me. I'm personally really interested in self-development and the psychology behind leadership & personality types. I would like to talk about that more. (ID 15)*

> *So, going through the Myers-Briggs test and reflecting on how my personality influences how I lead…then reflecting on clashes with people…and suddenly there's a light bulb when the penny drops and you realise you are completely different personalities. (ID 25)*

Three or four trainees also talked about recognising the role of culture and recognising from what they had learnt how the individual influenced the general culture. For example:

> *Leading culture was one that really sort of opened my eyes…all of a sudden recognising how culture is making such a huge impact on the NHS. An awful lot does relate back to culture. It's the way people are using the systems rather than specific systems. Gaining insight into it has opened my eyes (ID 23)*

Finally, in terms of human factors the learning related to working under stress was also highlighted by a few trainees. The following quote give an example of this:

…conversations about working under pressure…the curve of arousal, so the more the pressure grows there is an increase in performance to a point, then performance drops. So, these type of reflections about managing teams [in intense situations] I remember being quite good. (ID 30)

Putting things in boxes

The second key area of learning noted was around the usefulness of frameworks and theories to make sense of both the behaviour of others and the place of the individual within the NHS system. Some found the models helpful but for many the theories themselves were not remembered but were valued to give context to scenarios experienced in the EM environment.

I love the decision-making algorithms...it's really helpful to think what your response might be. I've actually screen shotted that on my phone so if I need help thinking through something I can just throw it up. It's all completely new to me...it's interesting. The NHS still feels quite baffling sometimes how things work. That idea of systems you can go through and recognise oh right that pathway is linear…ok there's my complex patient they're a bit more circular. And you know that's more of a network because the stakeholders are out in the community… there's probably not a lot I can do about it at this stage, but definitely as a consultant having those sorts of frameworks are quite helpful. (ID 25)

The storytelling of leadership

The third key area of learning from EMLeaders that resonated with trainees was described as the *'storytelling of leadership'*, the opportunity just to listen to consultants' experiences of leadership. This was described by one participant '*as valuable, if not more valuable'* than the curriculum content:

The most important component is actually the conversations, people coming together to discuss and reflect...hearing the stories, the storytelling of leadership. (ID 30)

Certainly, this coming together and hearing experiences and also relating the leadership theory to some of these experiences, was a key part of the learning take out for many. Even recognising that consultants did not always know all the answers and were still learning themselves was commented upon as helping trainees to feel more empowered in their own leadership. The participant below described this in their experience of the early face-to-face pilot sessions, elaborating on how consultants used their experience to make the learning about theory more accessible and relevant to EM practice:

…where we were able to talk to the leaders we aspire to be, to say I have this framework and they would say if you were in a difficult situation like this you could use this framework like this...so that in a real-world situation you can see how your leadership style affects that. I think that's really helpful. (ID 5)

The idea of this storytelling also led to discussion about the grade diversity of the groups. Certainly, the more junior trainees were keen to hear these leadership stories from the more senior doctors in training as well as consultants. The participant below described how senior doctors could provide useful perspective on leading, without being a consultant:

It would be nice to have that middle ground [between junior trainee and consultant] of someone who hasn't got as much clout as a consultant…'this is what I would do…because I've not got that backing' [of being a consultant]. (ID 15)

However, more senior trainees also suggested they needed a little bit more specific learning relevant to their particular leadership challenges and to prepare them for taking on the role of consultant, suggesting that having some sessions with more senior trainees alone would be valuable.

The value of workplace learning

The more junior trainees were generally quite satisfied with the *'groundwork'* learning from EMLeaders. More senior trainees (and some junior ones) also suggested that they needed more than what they had experienced in EMLeaders in order to develop the leadership skills necessary. Workplace ESLEs and engaged consultants that gave opportunities to run parts of a shift were described as powerful learning opportunities which were more impactful than learning within EMLeader sessions so far, for many.

A lot of consultants will really throw themselves into an ESLE and give you really good feedback...but you can do two a year...trying to get people to do more than that is basically impossible...most places don't have time for it. (ID 21)

Some trainees benefited from having leadership faculty members working alongside them and from particularly working in hospitals with particularly supportive training.

When the consultant pushes you into a leadership role, perhaps for a couple of hours, just so you can experience a bit of what it is like to be the clinical lead for example. I think that's great.
(ID 26)

Generally, however, trainees felt that these opportunities were less frequent than they would like and that the onus was often upon them to generate these opportunities which often was not practical. There was no sense evident, that workplace learning connected to EMLeaders at all. The quote below is indicative of the perception of a number of trainees.

Dovetailing on the shop floor doesn't really happen. If I'm honest. It's very selfless. So, it's down to me to do my e learning. It's down to me to take it seriously, it's down to me to really engage with the workbook and really reflect and then it's down to me to apply it. There's not somebody…no leadership mentor saying 'what do you think about this based on what you have learnt'. I think that's probably the weakness. (ID 25)

Seeking wider leadership support

There was an evident appetite for leadership learning and several trainees were vocal about the value of other leadership courses they had been on. These included amongst others, human factors leadership courses, and military type training. Things of particular highlight were:

- Needing time to settle into a leadership training session, which made the learning from full day sessions experienced on other courses more impactful than hour-long EMLeaders sessions
- the value of engaging in practical leadership exercises
- the opportunity to learn about the wider NHS
- working with a consistent cohort within which trust can be established

Beyond the positive takeout, there were some trainees who suggested that the way EMLeaders was presented did not facilitate learning and several struggled to recall what they had learnt and said things like: *'the specifics haven't stuck!'*. For three participants this was likely to be due to the fact they had had little interaction with EMLeaders since the initial pilot days. Something which in itself is interesting, given the acknowledged importance of leadership training for all EM trainees. For the others, part of this again was about the virtual nature of more recent delivery:

> *I really miss in person teaching. I miss that interaction. I think it's a different experience. I don't retain information in the same way as in a room […] It's very different what you get out of a group activity on line than you would in a room because people can't not pay attention when you are sitting in front of them in a room. (ID 20)*

And part, about a perceived reliance on e learning, which reduced the quality of learning:

> *I do want it [EMLeaders]. It's good material, but it harder to see…for something to be meaningful when it's just something you've done on your own sat in front of a screen for four hours…you know I find it interesting, I know it's useful, but in some sense it's not embedded because it's not experiential. It's just passive. I know you're supposed to reflect in the workbook and that's supposed to take the passive element out, but it just doesn't!' (ID 25)*

Finally, as previously mentioned some wanted more practical, experiential engagement: *'you'll remember it for the rest of your career, you'll remember as a leader what your learning point were',* be this initiative tasks and scenarios to embed the learning, or engagement with practical outcomes, such as a project.

Overall, for the majority, the data suggest that knowledge had developed as a result of exposure to EMLeaders, however, there were areas where improvements could be made.

9.6.4 Influence of EMLeaders on trainee behaviour

It was hard for participants to define how their behaviour had changed as a result of EMLeaders but there were tangible examples which suggested that the leadership of individuals was more empowered, compassionate and self-reflective as a result. In general, the influences on behaviour described, were less about being in the position of leader and more about skills and attitudes which contributed to their leadership mindset. The key themes related to behaviour were: *'having that leadership lens', 'giving you headspace'* and *'shaping interactions'.* These are illustrated with data in Figure 24. As some trainees had done other leadership training as well as EMLeaders and just developed with experience, they acknowledged that it was sometimes difficult to untangle the direct impact of EMLeaders.

The findings do indicate shifts in behaviour evident across the respondents and where noted, direct references to EMLeaders are pulled out.

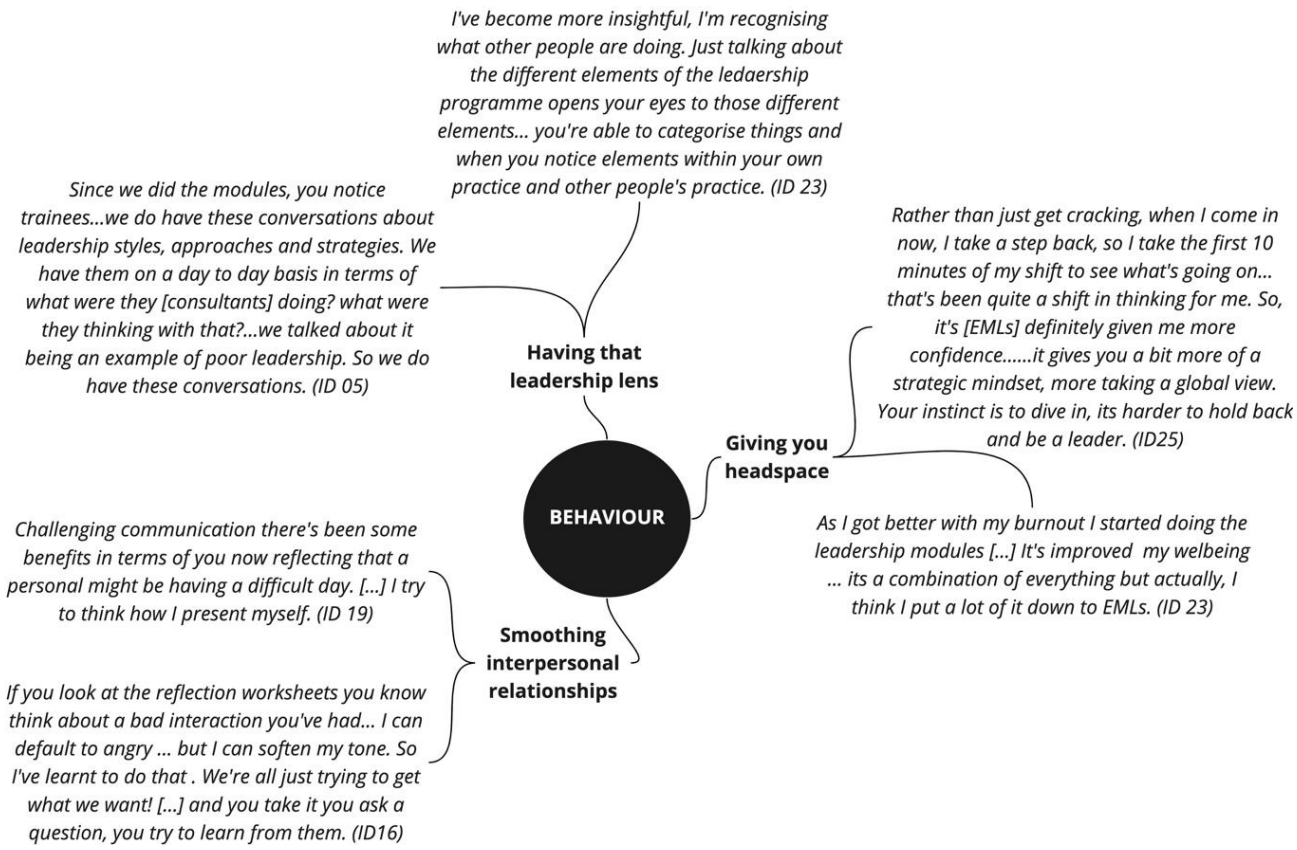


Figure 24. Influence of EMLeaders on behaviour - trainee interviews

Having that leadership lens

Trainees reflected that part of the value of EMLeaders was opening your eyes to leadership: *'making you recognise the skills you need'.* Trainees reported becoming more observant of the leadership behaviour of others, which helped you consider the type of leader you want to be:

> *You take away from people around you, the things that you love about the way they lead and the things you hate! That's important [to have] a reflective type practice that you look at people and think 'oh I never would have done that'. I think you can learn a huge amount from that. (ID20)*

This extended to having shop floor conversations with each other to help them understand and categorise the leadership actions they observed from their consultants: *'the leadership programme opens your eyes to those different elements.'* The participant below explains how leadership role models can shape your own behaviour:

> *I'm recognising what other people are doing that's having a positive outcome on me or the other trainees. I'm trying to mould myself to be more like that. (ID 23)*

A recognition of your own leadership styles, the role you play in the team and how you present yourself to others, were all factors that helped individuals begin to consider

themselves leaders and behave more like leaders. The participant below comments generally, that while it is difficult to directly link changes in behaviour to EMLeaders, it *'informs my practice'* and then goes on to talk more about considering your role as an individual in the team:

> *So, Leading Self, it has prompted me to consider how your self-management impacts on the clinical environment and your role within a team of people with different strengths. So, when I work clinically, I'm not just thinking about individual patients but also thinking about the other members of my team. It's just sort of smoothing day to day work practices. (ID 18)*

For, more senior trainees this EMLeaders *'leadership lens'* also extended to shaping behaviour to meet expectations of more junior colleagues and to be a role model: *'it's not just what do I perceive myself to be. It's also what does my much more junior colleague expect from me as their leader.'* The participant below expands on this:

> *I think it's probably important ['having the leadership modules'] because in a few years I'll be in that position and I need me not to get frustrated because the ST1 will see that that's an acceptable approach and I think setting good examples of leadership is important. (ID 5)*

So, overall, it was evident that exposure to EMLeaders changed the way trainees reflected upon their own leadership attributes and those of others.

Giving you headspace

The trainees reflected that EMLeaders helped them cognitively in several ways, alongside their general experience and training, which improved efficiency, reduced stress and frustration and helped to remain calm and professional in times of conflict.

Firstly, EMLeaders was described as *'giving you a global view', 'developing a strategic mindset'*. The understanding of systems, theoretical categorisation of behaviour patterns and personality styles all helped individuals take a step back, consider different perspectives and think before reacting. Participant 25 describes for example, now stopping to consider systems flow and staffing and how that should feed into his leadership of the shift team, rather than '*just get cracking'*. Whilst others described how taking a step back allowed them to think strategically about challenging interactions: *'I sort of disengage and go and have a few minutes to calm down and think of another way to approach it'.* The participant below on the other hand described how the leadership modules had reinforced general EM training, on the value of compromise and reducing stress and frustration. Knowing personal triggers also developed a sense of control:

> *…the leadership modules have reinforced that. I used to get a lot more frustrated with systems failures…I used to resort to anger and sort of not wanting to compromise because it felt like a defeat. As you go through your training you learn that it's better to not get frustrated…find another approach. I think that's a significant change for me [but] It's difficult to disentangle from what was my natural progress in training anyway. (ID 5)*

Finally, one participant talked about how EMLeaders improved his mental wellbeing by helping him to be more well-rounded, compassionate leader, taking on advice from others and being a more balanced leader:

> *I was very much a leader at the time, ENTJ [Myers Briggs category]… but I wasn't very open to people's ideas. When I started doing the leadership modules it supported me (sic) to be a more well-rounded person. It improved my wellbeing and I think a lot of it is down to EMLeaders. I would imagine it has changed the way I'm doing things and basically when I might perhaps get a bit of negative feedback, I [now] take it on board very quickly and go and address it straight away and probably address it in a way that I've learned from the leadership programme. (ID23)*

EMLeaders therefore, appeared to improve how people cognitively engaged with leadership and day to day tasks, improving emotional responses and allowing individuals to create some distance for themselves from those tasks to improve how they handled them.

Shaping interactions

Trainees particularly focused on how EMLeaders had positively shaped how they interacted with others. For those who were already taking on leadership responsibilities this influenced how they delegated and empowered others. For the more junior trainees, it was reflected more in the general way they interacted with others and were more understanding of different attributes and personality types. The participant below talks about some of the changes in people management made as a result of the EMLeaders Leading Teams module:

> *In terms of Leading Teams, it comes out a lot in daily practice. In acute situations, like a 'resus' situation it's easy to bring those leadership behaviours in…but its more useful when you're doing the more mundane day-to-day things, I have probably used it there more intensively. I delegate better and explain tasks better … managing people, that aspect of leadership is something that I'm now bringing in. (ID 15)*

Participants explained how they had learnt to use communication more strategically, rather than just communicating in the same way in every situation. This was supported by understanding when different styles are appropriate as participant 5 below explains:

> *We talked a lot about communication styles and how to resolve conflict…there were modules that helped you understand when your authoritative style might not be helpful […] So, how do I behave in this situation? what techniques can I use to recognise what behaviours might be unhelpful? (ID 5)*

Most, if not all trainees talked about the difficulties of referring patients on to other specialties and how communication strategies they had learnt helped smooth these conflicts. The data suggest that that as a result of learning more about different communication styles and personality types they now actively chose an appropriate communication strategy in different situations. This not only helped conflict but also empowered them in leading and interacting with different types of people:

> *…and thinking if I didn't communicate in my natural style, that just sort of flows from my personality, I thought well actually I am managing a specific personality*

here, so let me communicate in their style. I found it challenging and eye-opening! It's inspiring as well because you think actually, I can lead these people. You can do something about that to make it more constructive…if someone is a bit abrupt, you think, I need to sort of adapt here rather than bash away! (ID 25)

Finally, more senior trainees who were actively managing others, suggested that EMLeaders, was a positive contributor, though maybe indirectly, in shaping their leadership communication to be facilitative and compassionate:

No one comes to work to do a bad job. So, actually understanding why people are where they are, it's a really important part. I should be able to empower them to be to be what they need to be, the best of what they can be, and also for you to get the best out of them. […] So, I used to get very frustrated with some of the people I was supervising and think why they're not working hard enough?...then having that chance to share those stories and then hear how other people think, I think that forms the opportunity to challenge this concept. So, I think yes, it will indirectly and directly make an impact on the type of leader [I am]. (ID 30)

In terms of behaviour overall then, EMLeaders does appear to have some positive influence on behaviour, improving interactions and management of tasks and delegation. However, to a degree, individuals did find it hard to separate the impact of EMLeaders from other developmental influences.

9.6.5 Impact of EMLeaders on the organisation – trainee views

Whilst trainees had mixed opinions about EMLeaders and made many suggestions to make it better, all expressed support for dedicated EM leadership development. All agreed that ultimately it would help both support EM as a speciality and help positively shape the emergency department working environment. Equally, as for consultants, the current state of the NHS was prominent in these discussions, significantly limiting the impact any amount of training could have. The two themes identified were: *'Survival in a state of collapse'* and *'It is necessary for our specialty'*. These themes are illustrated in Figure 25.

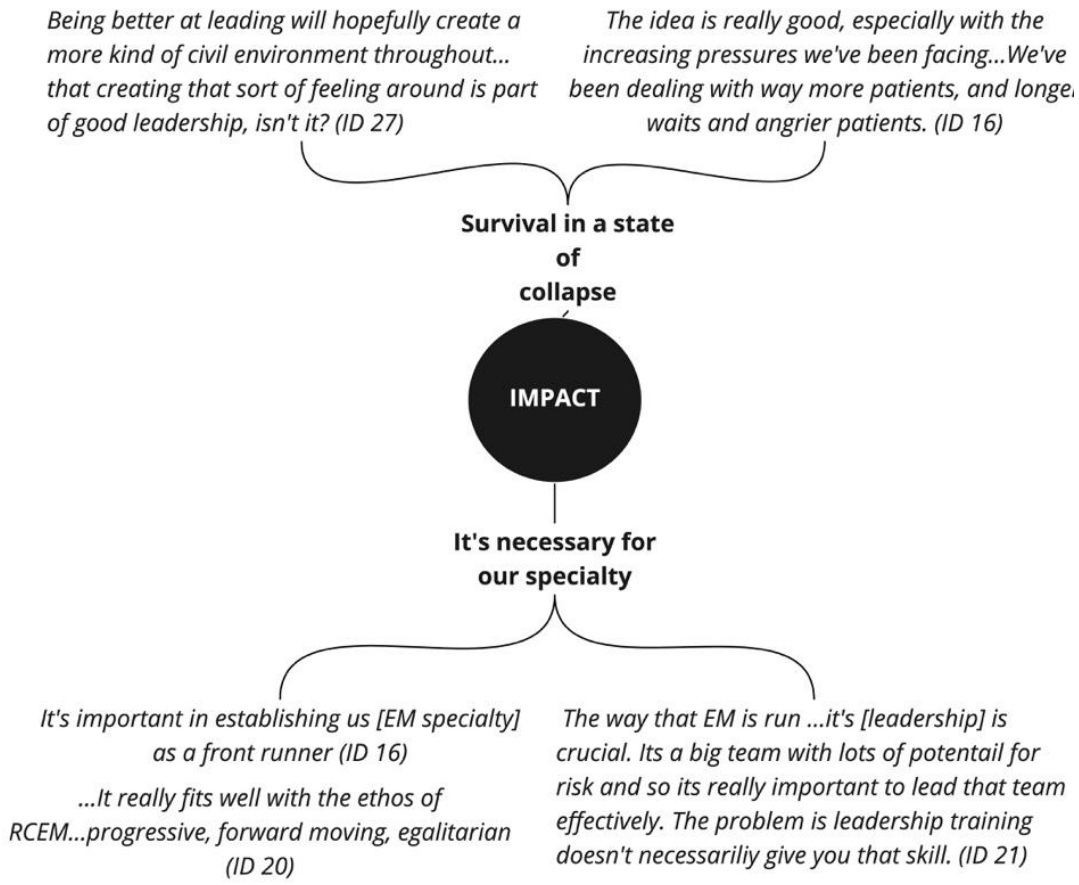


Figure 25. Impact of EMLeaders - trainee interviews

Survival in a state of collapse

The current state of the NHS, clearly impacted upon the EM trainees involved in the interviews. It affected their job satisfaction, stress levels, feelings of control and optimism. This was a generally negative direction within the NHS and not related to Covid-19, in fact, one or two participants suggested pressure was reduced on the emergency department during Covid-19. Trainees reported not only having to deal with more patients but that they were now also often angry. The participant below, describes a view echoed in several interviews:

> *I think you can become very fatalistic about the direction of the NHS; the waiting times since 2010 have massively increased. You can become quite fatalistic and get a slightly depressing outlook on your career, because it feels that there is an inevitable march to it getting worse and worse. You sort of wonder what you are doing. It's like a boiling frogs sort of thing, where you think if when I started, I'd realised it would be like this all the time, I wouldn't have done it. Now, when I come on a night shift and there's 60 patients waiting to be seen between 6 doctors, you think it's unsafe. Its unedifying. You don't feel like you're doing a good job, which is part of your internal locus [of control]. (ID 5)*

A number reported reducing their working schedules and going part-time for their mental wellbeing as well as to give them time to complete their training requirements, which in EM were described as *'brutal'*. Junior trainees, reported being aware demoralisation amongst

their senior trainee colleagues: '*quite a lot of higher trainees are fed up of being trainees at the moment and are looking to get out.'*

Within this context '*just doing some leadership modules isn't going to fix that!',* however, it had a role to play. Leadership training was seen as something vital to ensure *'survival'* and that it was necessary to ensure the working environment remained compassionate and civil, within the current pressures. Ultimately, whilst it was difficult to make wider definitive claims of impact upon patient outcomes, it did have potential to make EM trainees happier in their jobs, which is likely to have an indirect impact upon the wider organisation:

> *It will open up our brains to a different culture, which will slowly trickle through. Whether it will have definable measurement on patient outcomes, I don't know...it's a large thing and hard to measure. But could it make us happier and our jobs easier, which will affect patient outcomes, then yes, I think there is potential. (ID 16)*

This second participant goes on to make the point it is the communication elements of leadership training which will particularly help improve the working environment in the current climate.

> *For me to say is the leadership training is going to make the NHS better? No, it's not. It's probably going to allow us to survive in the system. The survival is it is about being kind to each other being compassionate and civil and putting the patient first. It's about having effective communication when you have conflict. (ID 30)*

In addition, having EMLeaders also provided almost a therapeutic vehicle to get together, reflect, support and help each other deal with the difficult times:

> *We have a training WhatsApp group and people are just sort of sending ranting messages on there. But, actually it's not a helpful way to engage. When you have an opportunity to go there and chat about it, when you are in a group, and you end up letting off steam. (ID 21)*

Though this trainee was also saying here that this was important, it was not possible to do this within the hour EMLeaders training. This stressful working environment was also acknowledged by trainees to impact on the chance of realistically getting engagement with workplace learning.

> *My educational supervisor is very good. I don't think it reflects poorly on him. It's just the fact that the departmental pressures are so significant that we just don't have time. (ID 5)*

Thus, while not impacting to change the wider organisation, participants felt that EMLeaders (though not necessarily in the existing format), had potential to develop vital tools to help them navigate the challenges of the current environment.

A necessity for our specialty

The second theme was about the need and benefit of leadership within the EM speciality. This related to the advantages of being known as a speciality with leadership expertise as well it being useful to equip trainees for the challenges of what they acknowledge is a unique

environment. Furthermore, they recognised that the gradual cultural shift and use of leadership language would help them collectively when they formed the consultant body.

Participants talked about there being potential benefit for the credibility and reputation of the specialty, if it were known for its leadership expertise. Furthermore, one senior trainee felt it may reduce the hostility of other specialties who see EM as *'the work generators'*. The participant below is representative of a number of similar comments about the value for RCEM and the wider EM workforce of developing specific leadership expertise:

> *It fits really well with the ethos of RCEM and of our specialty in general. Being progressive, sort of forward moving, egalitarian and aware of our place in the healthcare system. No one goes into EM for an easy ride but to try and look after patients. I think people recognise that. I certainly feel it will help us be a better team and look after patients better. I think it's a really good thing. (ID 18)*

They also talked about the fact that EM consultants often tended to be in organisational roles in trusts and so it would be useful for them to have these skills but is also beneficial for the college: *'it helps push the college's narrative in discussions about NHS structure and delivery.'* One participant who had issues with how EMLeaders was currently run, still felt strongly that it would be good for EM to have a reputation for leadership and that it would help recruitment.

> *...because we are such a broad specialty, the only thing that unites all of the EM senior trainees and consultants actually, is being an expert in leadership. […] I just have a point about EM recruitment. You've probably heard it's terrible at the moment. Absolutely terrible! I think part of the reason is that the training is so demanding and we get so demoralised by often poor leadership and not enough support from our consultant body. If the college said we will give people really good leadership training, I think we'd be way ahead of the other colleges, and it might actually bolster recruitment. I would definitely sign up for it! One of the reasons I chose EM was because of the chances to give real sort of raw leadership. Sometimes it does feel like you're in the trenches! (ID26)*

In addition, they recognised and stressed that challenges were different for EM doctors compared to other specialties and that it was helpful and necessary to learn leadership skills early and to develop a good understanding of systems and human factors. The EM trainees were forceful about their needs being different to many other specialties and that being why they needed strong leadership skills. This was a particularly consistent message across all the interviews and is powerfully explained in this example from the data:

> *You might have upwards of 100 patients that you're in charge of and you've got ambulances and walk ins coming in... ours [patients] are all on the clock. Ours are drunk and psychotic and elderly in a wheelchair for 10 hours and on a trolley for 12! There's a cardiac arrest coming off an ambulance and you pick up an MI in the waiting room after 3 hours. There are skills we have to learn, that we have to flex and grow, that are different to other specialties. There are other things you need to know, like running a board, deciding who needs to be seen next. That is all EM specific. (ID 16)*

Although, many reflected that EMLeaders may not be perfect yet, developing the programme had potential to shift the culture within EM, as trainees progressed sharing a common leadership language and shared understanding: *'it builds a shared understanding and camaraderie that would have impact from wellbeing to patient care.'; 'shared lingo'.* One participant reflected that on progressing to consultant it would be better to have work alongside like-minded colleagues who had a shared understanding of leadership: *'someone who has come through the training programme with me... a team member '*, so, things would slowly change and *'trickle through', generating 'shared understanding and ethos'* amongst EM doctors. Overall, there was a sense that investment in leadership training would pay back but it may well not be in the short term:

> *I can see that we're the first wave. A lot of the delivery will be up to us when we're consultants. The second generation of delivery is when it's going to take off and I get that! (ID25)*

> *If it keeps going, you generate a cohort …in 10 years 90% of EM physicians are all reading off the same hymn sheet when it comes to leadership and management expectations placed on them, then that would be a really strong cadre of people, I think. (ID 18)*

Overall, trainees felt leadership training was really important in EM and was something they felt there would be a tangible benefit from. Even though many had suggestions for improving how the leadership training was delivered, EMLeaders was seen as a work in progress that could have tangible impact for the specialty and the wider NHS.

9.7 Recommendations for the next stages of development of EMLeaders

In this section, the interview participants' recommendations for the future of EMLeaders are discussed. There was synergy between recommendations from trainees and consultants, and therefore the two groups are discussed and compared in this section. Both cohorts of participants were consistent in their views that EMLeaders should continue and that the EM specific focus was necessary.

The recommendations from trainees mainly concentrated around ways to improve delivery and how EMLeaders was embedded into the curriculum. Amongst consultants, the focus was how to improve workplace learning and develop the communities of practice. These factors are discussed below.

9.7.1 Delivery

Trainees were more vocal about the necessity of making changes to the delivery, than were the consultants, however this did not detract from their support for having EMLeaders:

> *I guess the feedback is not going to be that positive but I'd like the college not to give into that. It just needs to be reengineered to be more useful. I don't think the notion of leadership in training is wrong, I think it's because of the delivery not the content (ID 5)*

> *I do think there's huge value in them [EMLeaders modules]. I do think it's a useful programme. If it was delivered as it was intended it might make sense as you go*

forward. I think the problem is we're clouded by the delivery that we've had in the first three years. It's going to make it harder and harder to engage as we move further on. (ID 20)

- Trainees felt that sessions would be more impactful if offered in person and that the learning from e modules, though useful background was not enough to change practice.

- Short sessions within regional training may have a role to play and could be useful but that was not a substitute for full day, in person sessions at least some of the time. The latter not only giving more time to allow a mind shift change to encourage reflexivity for example, but also because it allowed for social interaction which was something that trainees felt contributed to their mental wellbeing.

- Trainees suggested the emphasis on e learning be reduced in favour of face-to-face teaching. This was particularly important for the reflexive parts of the course with a good proportion of trainees finding the reflection element of the e learning unsatisfactory. It was also recommended by several trainees that EMLeaders was missing an experiential, team-building initiative, practical part.

- There was also a good deal of comment about the advantages (and disadvantages) of mixing the grades within the leadership courses. The more junior trainees enjoyed learning from their more senior peers, though there was a suggestion that it would be helpful to have senior doctors leading some of the sessions to share their experience as they were sometimes less engaged and willing to share their perspective as participants.

- The more senior trainees suggested that they could benefit from some sessions with doctors at their own grade, being pushed further and focusing specifically on skills they need to make the step up to consultant. On the other hand, the consultants did suggest in person leadership teaching resume, but not with the passion shown by trainees. Consultants were more aware of regional differences in delivery of EMLeaders: *'patchy delivery'* and recognised the need for this to be addressed.

9.7.2 Developing EMLeaders within the curriculum

- Both trainees and consultants recognised that EMLeaders needed to be mapped longitudinally across the training period. The trainees talked about spiral learning, wanting to return to each module, going into it in more depth as they went through their training.

- The majority would also focus primarily on human factors (self, teams, culture) in the first three years of training.

- Trainees talked about two modules a year, being the ideal number, they could cope with alongside other training, with a good number of trainees saying the current volume was too much for them.

- There were several comments that collectively suggested that EMLeaders could be branded more distinctly as a programme, this involves elements of mapping but could also include having clearer statements of what the programme is aiming to achieve, going through the programme with a consistent cohort, having a practical team building element which may be a day or residential weekend (see above). The consultants were less specific but indicated it would be more useful to map different parts of the content to junior, middle and senior grades. When consultants talked of embedding EMLeaders and it becoming *'bread and butter'* it is likely that this may include elements of spiral learning like the rest of the curriculum, however this was not explicitly stated.

- The other factor, which was raised by both trainees and consultants was whether all EMLeaders training be made mandatory. Both recognised pros and cons for each. A consultants' suggestion was that there be a two tier EMLeaders, the core being offered to all and being mandatory within the curriculum but optional more in-depth EMLeaders training offered to those with most interest. This may include having workplace leadership fellows. Some trainees also discussed the merits of this kind of approach but highlighted concerns, such as, the need to have the time prioritised and ring-fenced for those wanting to do optional, more in depth leadership training and the need to guard against it becoming a self-selecting group of stereotypical leaders:

  …maybe there's a couple girls in that boy's club but actually maybe some of the quieter kind of people that don't put themselves out there quite so much are actually really good leaders but just lead from the back… actually they may be the ones that we should help and encourage. (ID 20)

- An alternative suggestion from one consultant was the EMLeaders be a separate standalone programme that individuals volunteer to attend. In this way you would invest in a smaller team of experts in leadership.

9.7.3 Workplace learning

- Both trainees and consultants recognised that workplace reinforcement of EMLeaders was a current weak point. Trainees had several ideas including, formalising EMLearning topics with ESLEs; introducing a '*you're in charge'* part of training where all trainees get short periods where they are running the shift; formalising shopfloor mentorship; having a leadership assessment form and completing it regularly with supervisors; having a specific leadership mentor: *'true vocational mentorship'*; doing a reverse ELSE, where the trainee shadows a consultant. Trainees, however, suggested a pessimistic view of these suggestions becoming a reality, describing aspirations as a *'pipedream'.*

- For consultants, developing the Communities of Practice was seen as an urgent priority but was nevertheless a challenge. They also recommended formalising workplace structures to support leadership. For example, one idea was that there should be one leadership specialist appointed or developed within every ED and an ELSE introduced, which mapped to the leadership framework.

9.7.4 Sustainability

- Sustainability was only mentioned by one trainee who highlighted the need for materials to be continually revisited to remain current and the need for evolution in the faculty team to ensure enthusiasm and knowledge is retained. Future sustainability was a key concern amongst consultants and they recognised that this was a vulnerable point in time for EMLeaders: '*I think the danger is... as it comes towards the end of the program is that we're going to lose a little bit of momentum.'*

- Consultants highlighted that promoting and engaging people with EMLeaders required considerable investment of time. They were vocal about the need for adequate funding of leadership faculty staff, for them to legitimately use their time in this way and to maintain momentum.

- In terms of staffing, the current cohort of leadership faculty members has benefitted from extensive development of their own leadership knowledge as part of developing EMLeaders. They suggested that filling vacancies can be challenging as people are not confident of their theoretical leadership knowledge, highlighting the importance of continued investment in developing leadership faculty. Consultants were generally in favour of keeping development days and leadership consultancy support going forward, to facilitate this and maintain the exchange of ideas and good practice.

Table 11. Recommendations for the future - quotes from consultants and trainees

Area	Summary	Trainee quotes	Consultant quotes
Delivery	Return to some face-to-face teaching	*There's going to be a significant number of people who get little from it because you need time to think through it. Face-to-face, a sort of training day workshop would be much more effective than e learning. (ID 25)*	*Having to face-to-face time is really important. Make it a day half a day but protected away from the hospitals. It would be important and then maybe you could then do follow ups virtually potentially, which then that kind of you get the best of both worlds if you, you know if you could get the same people who attended face to face to attend virtually, that would also be great because you already generate some community in those face-to-face sessions. (ID 30) (non-faculty)*
	Develop an experiential element	*To use a real world example there's a relatively famous medical course it's called ATACC. It is thousands of pounds to go on… It flattens the hierarchy…lots of consultants say it is incredibly humbling…you've got a medical student being the team leader. People rave about it. I just think RCEM could do something like that and make it part of the training. (ID 25)*	None
	Make changes to the role and structure of e-learning	*It's the volume that stresses me and how quickly I'm expected to do it. I feel like if you slowed down, if you could get through all nine modules but you have longer to do it, it would be manageable. (ID 25)*	None
	Build a consistent cohort	*A lot of these leadership questions are quite personal, it [is] much easier to discuss those personal experiences with consultants you've been around because they know you. It's kind of harder when you've got someone who swoops in who you've never met before. (ID 20)*	None
	Segregate grades?	*I wonder if you could do ST1-3 and ST 4-6? Because now it is becoming integrated within our training pathway. I think there is scope to segregate it now whereas at the beginning it was new [for everyone]. Now I've done it, I feel like I'm pushing a bit further. I think looking at scenarios that were more difficult. (ID23)*	*In terms of allowing the juniors to see the seniors and the problems that they may face, I think it's good for that, cross-fertilisation for people to get to know each other, but it can inhibit people in terms of the ability to open up and be a little bit intimidated. Overall, yeah, I'd probably say it's better in their year groups, although I do oscillate on that one. (ID 17)*

Area	Summary	Trainee quotes	Consultant quotes
Developing EMLeaders within the curriculum	Map EMLeaders to trainee development	*What would be helpful is if this was a spiral curriculum. These leadership modules were for everyone (ST1-6). You're talking about a range of people with a wide range of leadership experiences and roles. Don't condense it into a few weeks have it as a spiral curriculum so its iterative and sort of embedded in your practice more. The difficult I find with this is that we've done all these modules with workshops that end up being 45 minutes. (ID 5)*	*So, whether it could be put as a menu of options so there are there 9 modules at the moment, they're not really organised into what might be relevant for a doctors needs ...this could be done with a view to early development, middle development, later development, almost be slightly rebranded into that kind of way without too much difficulty. (ID 12)*
	Make EMLeaders mandatory or develop an optional in-depth stream for some	*You need a bit in between don't you? You need people to all get exposed…and these modules I've done as mandatory, have been really helpful as a grounding. I think everybody has to be given the same opportunity for a grounding in leadership. In terms of people's own self-development, adult learners do better when it's something they want to do. [So,] I think maybe not mandatory after a certain point. (ID 15)*	*I would like to have a bit more freedom to somehow engage trainees. Maybe you run apprentice programs for the more enthusiastic trainees. [...] You know, trainees who want to develop that level of insight and emotional intelligence then give them the opportunity to do it. That's where I would set up an apprentice program for the engaged higher trainees who want to take this sort of stuff on. You can give a quality kind of series of days to engage people and then that way you'll develop some expertise. (ID 12)* *I think probably if we as trainers as the leads in the region carry on continuing developing and delivering the workshops which needs to be accessed on a silver study leave type basis from the trainees, you probably won't get as many trainees as you would normally do as you forced it on them. But I think the quality of the days would be sufficient to generate the interest and people would carry on coming back. So I think you deefine it as a separate entity and persuade people of the importance of it. (ID 17)*
	Brand EMLeaders as a distinct programme	*It feels like a couple of afternoon sessions we've had to discuss some kind of topics that don't quite fit into my clinical framework. It doesn't feel like a programme at all. Maybe if it had been delivered the way it was intended it would? I don't know! (ID 20)*	None but see Map EMLeaders to trainee development above
	Embed it into the curriculum		*We have started the journey and I think it's about developing the language and the expertise, so it become second nature … these are different models, so it's about*

Area	Summary	Trainee quotes	Consultant quotes
			just embedding it within our curriculum so that it is given as much importance as the traditional things. That's the key thing! …how we're going to carry it on, *maintain expertise and create that intellectual breadth amongst the people that are delivering training. (ID 14)*
Workplace learning	Formalise workplace learning	*…More practical department-based learning…why don't you spend a day observing your consultant and see how they manage a busy shift. To me there isn't that opportunity to just observe. It would be nice for it to be more practical and to support the transition between the module and theory of what we've been learning and what does this mean on the shop floor. (ID 19)*	*I think we should tailor the ESLEs to a leadership module or two (ID 24)*
	Develop the communities of practice and improve equity of delivery across regions	None	*I think that we have to really push is to make sure that every department has an engaged trainer or trainers who understands the EM leaders. That is the biggest worry that I have that you know, despite the communities of practice, it's that the delivery will still be patchy and we need to push training the trainers most of all. And I think the trainees will come as a consequence of that and the trainees will come because those who are involved will continue to deliver anyway, but it's a 70:20:10 split where most of this should be discussed on the shop floor and if we don't have those trainers in place, I think EMLs will lose some of its impact. (ID 17)*
Sustainability	Ensure sustainability of staffing	*You get a couple of really keen people that kind of take it forward and devote extra time to it, but if you don't have people to maintain it's currency and the sustainability of the resources and the administration of it, then it falls by the wayside. (ID 18)*	*We've tried to succession plan, or encourage other consultants in the region to join our faculty and to sort of help and share some of the facilitation skills, etc. We've been met with a bit of a, 'I'm apprehensive to do this, because I don't have any formal leadership background training. And I haven't attended any of the college facilitation days, and I feel I'm not skilled to do what you're doing'. That's kind of what we've been told. So, I think for the college looking ahead, providing some form of facilitation, skill development platform will be imperative to the ongoing success of the program. So, I think it's quite apparent that our biggest challenge will be having a wider spectrum of consultants to help and do*

Area	Summary	Trainee quotes	Consultant quotes
			some of the facilitation and, and ensure that, you know, the program continues and we build on the successes thus far. (ID 7)
	Ensure adequate funding	None	*It's been funded at 4 hours a week, which is why it's been so good. It's very rare that you get extra time to do these sorts of things. So, definitely, the funding of the program [is] key to its success I think, and the fact that it is actually a separate part of money which has enabled clinicians to deliver something extra. A 40-hour week emergency physician job is absolutely rammed with activities so we don't have time to do anything else. I think and the current expectation is that individual schools will put in bids together to try and decide how they're going to carry this on. I can't imagine their schools have got any spare cash to fund this stuff, which is why the external funding is key. If there's one thing to highlight out of it, [it's that it must be] properly resourced. (ID 11)* *It's really good, but it's a good start, it's not finished. We can grow it and grow it, so that'll be great but the funding for this nationally runs out at the end of March, so at the end of this financial year, so then it's sort of up to sort of local negotiation, whether not you can carry on with some local funding. (ID24)*

9.8 Conclusions from Qualitative Phase

It is worth acknowledging the limitations of this phase – it is possible that respondents may not have had clear recollections of their experiences of the EMLeaders programme with the passage of time. It is also possible that additional ideas, experiences and viewpoints could have emerged if further interviews been conducted. Nonetheless, in this part of the evaluation, we have explored consultant and trainee perceptions of EMLeaders in considerable depth.

Both trainees and consultants highly value leadership training and believe specific EM leadership training should continue. The consultants who have been involved in the co-design and delivery of EMLeaders are highly engaged and proud of the programme, describing their own powerful learning journey and personal development. For the wider consultant body, the challenge of developing engagement was evident and the consultants interviewed had a more detached view of the role of EMLeaders within EM as a specialty.

The trainees discussed their learning and behavioural shift following engagement in EMLeaders and expressed an appetite for learning about leadership and developing expertise. They were supportive of the programme as a strategic means of developing EM as a speciality and RCEM as a relatively new college. There were many positives of EMLeaders, though trainees had tired of the self-directed online learning e modules implemented during the Covid-19 pandemic, finding the volume excessive and lack of face-to-face contact less engaging.

Both consultants and trainees had recommendations for the future direction of EMLeaders and there was some synergy between the two groups.

10. Economic Analysis

10.1 Background

Health systems invest significant resources in leadership development for physicians and other health professionals.(1) Emergency medicine (EM) is a field where the work environment is a major challenge for any organised teaching and training.(2) The shift pattern of work, absence of available real-time situations in a controlled environment, required availability of teaching faculty 24/7, and difficulties in quality control of teaching and training represent the major challenges. This means that a lot of organisational, departmental as well as operational support is required to run a successful teaching programme. Thought continues to be given across the world both to formal and structured leadership training, its implementation, and succession planning for those who will become EM leaders in the near future.(3) In general, economic evaluations of management training programmes is sparse.(4)

In terms of training outcomes, consideration of the *longer-term* effect of investment in leadership training will require information on how many trainees apply the skills taught, how long trainees continue to apply them, and how long the content of the training conforms to national or international guidelines. Because cost-effectiveness is an important service goal for emergency care delivery,(5) leadership training should also improve service efficiency.(6) Furthermore, improved staff retention may be an important benefit, although it is known that a range of factors other than those addressed by leadership training lead people to leave a career in emergency medicine.(7) The ideal approach to measuring the effectiveness of a training course requires some form of experimental design, where one group receives the new training and a control group receives existing or 'historical' training. A randomized controlled trial (RCT) is the gold standard, and although RCTs of leadership training exist these are rare.(8) Because EM trainees in England had access to a plethora of leadership courses prior to the EMLeaders programme, a single control group is not easily identifiable.

Estimating the cost of any training programme is similarly complicated.(4) Actual cost will differ from the EM training programme budget for at least two reasons: (i) multiple partners will contribute to the training and their costs may be difficult to track, and (ii) some contributions will be 'in-kind'. In addition, each partner will have a different perspective and a cost analysis conducted from the perspective of a single partner will inevitably be incomplete.

The original plan for economic evaluation of the EMLeaders programme included a comparison of costs and outcomes for the training programme itself(9) together with some analysis of comparison with earlier training, and a return on investment analysis to identify the likely 'pay back' to be expected for every pound spent on the programme.(10)

The ultimate aim of the economic analysis was, in so far as the available data and survey findings allowed, to enable Health Education England (HEE) and the Royal College of Emergency Medicine (RCEM) to better understand the economic value of their investment in

a national EMLeaders course. The final decision on the shape of the economic evaluation and interpretation of findings was to be made in consultation with key clinical stakeholders.

10.2 Evaluation Framework

The long term strategic aim of the EMLeaders Programme is to develop personal skills and resilience in EM clinicians, to reduce the number of physicians leaving emergency medicine (attrition) and to ensure a successful workforce in one of the most intense environments in the NHS.

The EMLeaders Programme differed from the previous 'status quo' in that (i) it aims to provide training tailored to the specific needs of EM staff and (ii) it is delivered in a cohesive manner across the country through the following three components:

- **Component 1 (70%): On the job 'shop-floor' training events** (i.e. bite size learning, supervised learning events, simulations exercises, leadership assessment tool) – supported by a multi-professional, Trust-based Community of Practice (CoP)
- **Component 2 (20%): Self-directed learning** (i.e. nine e-learning modules plus further resources developed locally for programme)
- **Component 3 (10%): Formal learning** (i.e. Regional study days with EMLeaders integrated, separate EMLeaders specific training events).

The framework for the economic evaluation was refined as data availability became known.

10.3 Data Sources and Estimations

10.3.1 Available data

The following data items were made available to the evaluation team:

- **HEE funding**: allocation for Programme Activity Staff (PA) to the 12 Schools (2018-2021)
- **Self-directed learning**: e-module completion rates by job and region (demographic data

An initial plan to incorporate rates of attrition was dropped early in the evaluation process when HEE and RCEM advised that rates for EM clinicians were not routinely available.

Using the data provided, an economic analysis was undertaken to address the following two areas:

1. *EMLeaders programme cost and outcomes*
2. *Comparison with other leadership courses (including return on investment)*

The analysis was undertaken from a national (HEE/RCEM) perspective.

Various constraints existed in terms of estimating a comprehensive cost of training. In the absence of a comprehensive training programme outcome measure, a number of proxy outcome measures were used. These are outlined below along with any assumptions made when interpreting the data.

10.3.2 Estimating EMLeaders programme costs

A cost analysis was undertaken from a national (HEE/RCEM) perspective, primarily because local costs were not available. Certain costs were excluded from the national estimate: (i) the initial costs borne by the Faculty of Medical Leadership and Management (FMLM) to develop the materials used in the Pilot Days which formed the basis of the e-modules; (ii) the cost of transferring the FMLM and PA material to an e-module format. This means that only a partial central cost could be estimated.

School costs had to be excluded entirely because they could not be identified within the study timescale. These costs were not collated centrally and are likely to vary due to the autonomy schools had in delivery of EMLeaders. This means that a survey would need to be undertaken to identify individual school costs.

10.3.3 EMLeaders programme outcome measures

Two outcome measures indicative of programme outcomes were selected. One measure focused on component 2 of the EMLeaders programme; the second represented an overall measure for all three components.

- **Proxy outcome 1 (component 2):** E-module completion rates
  Data available for the self-directed learning element included the number of module 'launches' and whether modules were completed/not completed. A module launch meant that an individual had accessed a module. Completion simply meant all screens had been viewed; with non-completion indicating outstanding material which had not yet been accessed. There was no information on the degree of completion. Students were also not tested or examined, so completion does not represent understanding or application of the material. There was no prescribed timetable for completing e-modules, and no prespecified points in their training at which to use the materials; e-modules were used at the discretion of the school and trainee.
- **Proxy outcome 2 (components 1,2,3):** Satisfaction reported in national survey.
  As part of the online national survey respondents were asked to rate various statements about the value of leadership courses (EMLeaders and other leadership training). These were used as a more a holistic measure of satisfaction with a leadership course.

10.3.4 Other benefits

There are a number of other non-monetary and intangible benefits resulting from a training programme, especially a national programme. Although non-monetary benefits are excluded

from the economic analysis, some mapping of these is included in the 'return on investment' (ROI) section.

10.4 EMLeaders Programme Costs and Outcomes

10.4.1 EMLeaders cost per trainee

Funding provided by RCEM to each school was determined by the allocation of Programme Activity staff (PA) which was itself associated with the number of trainees. The PA allocation was set for the period 2018/19 and did not change until 2021/22 where the allocation was reduced in line with a funding reduction. The PA funding allocation did not meet the full costs of delivering EMLeaders, with schools providing their own funding, as explained above. Bearing these caveats, Table 12 presents an estimated cost per trainee for each school based on RCEM annual funding and trainee numbers from the UK Schools of Emergency Medicine 2018 Education Census (the only figures available).

Table 12. Estimated cost per trainee from the RCEM annual allocation (2019/20 and 2021/22)

School	Cost per trainee per year	
	2019/20 (12m funding)	2021/22 (12m funding)
Peninsula	£604.10	£775.00
Thames Valley	£405.41	£418.92
Severn	£361.45	£373.49
Wessex	£340.91	£352.27
Kent, Surrey, Sussex	£588.24	£455.88
North East	£430.11	£333.33
East Midlands	£363.64	£281.82
West Midlands	£250.00	£193.75
East of England	£200.89	£160.71
North West/Mersey	£221.24	£159.29
York and Humber	£169.49	£152.54
London	£174.22	£125.44

The role of Programme Activity staff (PAs) did not stay the same over this time period. At the beginning, during the development of EMLeaders, this funding represented a type of 'pump priming'. PAs were tasked with creating content which could be shared nationally and not just school specific. The PAs built upon the initial content which had been developed by the Faculty of Medical Leadership and Management (FMLM) and which was presented at pilot

days. In some cases, schools used part of their PA funding to contract with external organisations to create content. Now the PA role is focused more on local delivery of courses and ensuring that materials continue to meet the needs of clinicians.

The Unit PA cost per annum was fixed at £10,000. The PA allocation suggested by HEE for individual schools is shown in Table 13. The small variation of PAs per area (3-5), combined with the large variation in trainees per area (40-287), resulted in the six-fold variation in the apparent 'cost per trainee' shown in Table 12. The allocation of PAs across schools in the most recent year appears more equitable in terms of trainee numbers, presumably because fixed-cost pump priming activity had reduced as the course content had been developed and the focus is now more on local delivery.

Table 13. HEE suggested PA allocation per school (2019/20 and 2021/22)

School	Suggested PA allocation (based on trainees & sites) for 2019-2020	Suggested PA allocation (based on trainees & sites) for 2021-2022
Peninsula	3	3.1
Thames Valley	3	3.1
Severn	3	3.1
Wessex	3	3.1
Kent, Surrey, Sussex	4	3.1
North East	4	3.1
East Midlands	4	3.1
West Midlands	4	3.1
East of England	5	3.6
North West/Mersey	5	3.6
York and Humber	5	3.6
London	5	3.6
Total	**48**	**39**

10.4.2 EMLeaders module completion rates

HEE provided a data extraction from Tableau containing information on completion of e-modules (proxy outcome 1) for the period November 2020 – October 2021.

The various modules are listed in Table 14 below.

Table 14. EMLeaders modules

EMLeaders Stage 1 core sessions	EMLeaders Stage 2 follow on sessions
Leading Self	Leading Change
Leading Systems	Leading Culture
Leading Teams	Leading People
	Leading Quality
	Leading Service
	Leading Strategy

The data extract did not include the school where trainees completed a module, only the NHS region. Therefore, it was only possible to determine module completion rates by region and not by school.

Table 15 presents the results of a logistic regression showing that there was no statistically significant difference in the likelihood of e-module completion between regions (p-Value >0.05). This analysis was undertaken for a simple binary outcome of completed/not completed.

Table 15. Analysis of e-module completion by region for the period November 2020 – October 2021

Module Completion	**Number of records**	**Odds Ratio**	**P-Value**
East of England (reference)	669		
London	841	1.12	0.304
Midlands	922	0.91	0.406
North East and Yorkshire	1006	1.02	0.875
North West	1681	1.12	0.231
South East	1598	0.89	0.223
South West	920	1.20	0.092

Logistic regression analysis was also used to determine whether job title was associated with differences in completion of modules. This might be evidence of a difference in the cost-effectiveness of training in different staff groups. The results are presented in **Appendix 2**.

The logistic regression model examined the association between specialty training grade, ST1-ST8, and likelihood of completing an e-module once accessed. It was found that ST8 and ST7 doctors had the lowest and second lowest odds of completing a module once they had launched it, and this was statistically significant ($p<0.05$). Interpretation of these findings in consultation with key clinical stakeholders indicates that completion may be lower in these groups due to: extra clinical demands on these trainees' time; conflicting need to complete multiple sub-specialty training during this period; or individuals requiring additional training to pass their certificate of completion of training (CCT).

The Tableau data extraction contained a small number of records (n=37/7,368) where the job title appeared to be for people not in Emergency Medicine specialty training, including Foundation 1/2 doctors, Post-CCT Fellows (now effectively consultants), and pre-CCT Fellows (presumably included as trainee because completing their training time component after exams).

10.4.3 Specific EMLeaders data problems

Data extracts were for 12-month periods, but context in terms of the stage of programme development is unclear.

Also, each school delivers EMLeaders differently, and without information on how schools are directing trainees to use the e-modules, it is difficult to draw clear inferences from the data

on completion rates. 70% of all module launches were coded as not completed, including modules which were launched early in the data extraction period, November 2020, but not completed by October 2021. We cannot be sure that this is because some students failed to complete an action to convert to completed status.

10.5 Comparison with other leadership courses

There is no single specific leadership model for EM training. A 2018 systematic review could identify no consistent and workable leadership training for the emergency medical team leader, while also identifying evidence that a lack of leadership is highly detrimental to performance during critical, clinical situations.(11) An earlier review reported lack of a standardized approach to team leadership assessment in emergency medicine.(12)

In our online survey, there were 90 respondents who had experience of another leadership training programme (see **Appendix 2**). The types of training varied considerably, with no obvious pattern emerging. Approximately one in four (24/90) had completed some form of University leadership training. A similar number (25/90) reported attending programmes provided by the NHS, Hospital Trusts or organisations such as Aqua (Advancing Quality Alliance https://aqua.nhs.uk). Fewer than one in ten (7/90) had been trained in leadership as part of military training. The largest group of respondents (34/90) identified some other form of leadership training, mainly commercial courses; once again, there was no common pattern in these.

10.5.1 Comparison of course satisfaction

When online survey responses were compared for this group and those completing EMLeaders, participants in both groups were similarly positive in terms of grading 16 statements presented to them. There was no statistically significant difference between the EMLeaders and the 'Other Leadership Training' group in terms of responses to "I would recommend the training that I undertook to my peers" ($p=0.317$). The inference from this is that EMLeaders is not inferior to other training in terms of reported satisfaction (proxy outcome 2).

However, clinicians completing EMLeaders are likely to have experienced this training more recently than those who received other training. The time lag between receiving and considering the value of any training may be affected by recall bias.(13) EMLeaders trainees are also likely to have been applying their learning in a team leadership position for a shorter period. Others who have received non-EMLeaders training may have had longer to test the learning in a work environment. Although such factors may have influenced online survey responses, for the purpose of the economic evaluation they are assumed to be minimal.

10.5.2 Comparison of course costs

The broad range of Other Leadership Training reported mean that it is impossible to estimate an accurate cost for comparison purposes. For example, training at the Royal Military

Academy Sandhurst where officers in the British Army are trained to take on the responsibility of leadership is likely to take several weeks and cost ca £26,400.(14) Table 16 presents prices for some of the other leadership courses reported where this could be identified; they vary in length and coverage. Other courses shown in Appendix 1 included those that focus on particular aspects relevant to leadership, rather than a wide spectrum. For example, *NHS Senior clinical leadership* (eCLIPS) which focuses on Project Management (https://www.eclips-online.co.uk/leaflet/AA_11) and *Medical leader in practice* (AQUA) with a focus on Quality Improvement (https://aqua.nhs.uk/programmes/medical-leaders-in-practice). The courses listed in Table 16 are all online (apart from a London-based option for 2-day workshop), so are comparable to EMLeaders e-learning modules. Once on-line materials have been developed, the cost of delivery through self-directed learning is minimal.

However, in EMLeaders, e-modules only represent 20% of programme, materials are designed by specialists with the EM context in mind, and the e-modules are available to trainees to access at any point in their training at no additional cost. The EMLeaders programme includes two other components: on the job 'shop-floor' training events (70%) and formal learning e.g. Regional study days (10%). The range of cost per trainee figures shown in Table 12, £125.44 – £455.88 for 2021/22 PA allocation and £169.49 – £588.24 in 2019/20, provides an indicative figure for EMLeaders to compare with a 'mean' cost figure in Table 16 of £579.50 (range (£370 - £995).

Table 16. Examples of other leadership courses reported

Course name	**Cost per course**	**Details**
NHS Leadership Academy award level 5 **"**First leadership role"	£995	100 hrs online study plus 3 one-day workshops (currently delivered virtually). https://www.leadershipacademy.nhs.uk/programmes
ILM leadership certificate (Level 5), City & Guilds with Cornwall County Council	£370 Certificate £554 Diploma	Online Certificate (3-6 assessments) https://www.i-l-m.com/learning-and-development/management/management-and-leadership-generic/8607-level-5-leadership-and-management
Management and leadership course by ISC Medical	£399	2 day course via zoom. (12 CPD points) Face-to-face option (London) Max 20 people. https://www.medical-interviews.co.uk/product/leadership-and-management-course?gclid=EAIaIQobChMI9ZLI1qLn9gIVS-vtCh2egwoDEAAYASAAEgIoq_D_BwE
Cost per course: Mean (*Range*)	**£579.50 *(£370 - £995*)**	

10.5.3 Financial return on investment (ROI)

A ROI analysis provides an indication of the additional monetary return to be expected for every pound spent on the EMLeaders programme compared to that spent on previous leadership training (*status quo*). An accurate figure is dependent on access to (i) cost data for

these alternatives and, most importantly, (ii) data on benefits that can be converted *into a monetary value*). ROI excludes benefits that cannot be quantified in this way.

The total cost of EMLeaders based on PA funding for the 48 month period 2018/19 to 2021/22 is estimated at £1.21 million. Based on the total number of trainees (1,689), if all trainees were to receive 'other training' with a mean cost per person of £579.50, this would cost £978,775. This indicates a notional increment of £231,225 on moving to EMLeaders (£57,806 p.a. pro rata).

The historical 'status quo' (£370 - £995 per person) may be compared to the costs for EMLeaders shown in Table 12 (£125 – £775 per trainee in 2021/22). The £1.21 million cost of EMLeaders excludes input from the schools and other indirect costs such as attendance costs, participant travel and time away from job, materials, instructors, etc. It is therefore likely that this cost is an underestimate. It also does not differentiate initial 'development costs' from 'steady state' delivery costs, although the 2021/22 figures might be assumed to be near steady state. The EMLeaders funding does however covers additional activity over and above nine e-learning modules.

At the same time, the 'status quo' cost figures are based on a small number of courses where it was possible to identify the price and so cannot be considered definitive. The range also excludes the very expensive military training since this was reported relatively infrequently, may be necessary for other purposes (e.g. army medical reserves), and the leadership content may not be generalisable.(15)

The three components of EMLeaders programme are likely to produce a number of non-monetary or intangible benefits which cannot be included in a financial return on investment analysis. An overview of these is shown in Table 17 and compared to the historical 'status quo'. Although this Table includes some 'longer' term benefits, other important long-term benefits such as such as improved *quality, efficiency and responsiveness* are excluded. These are difficult to estimate in the EM setting but a study design has recently been proposed that uses multiple quantitative and qualitative methods for evaluation of these.(6) In the case of the EMLeaders programme this would involve tracking trainees over time and this information is currently unavailable.

10.5.4 Sensitivity analysis

Sensitivity analysis is used to explore the impact of variations in estimated costs and benefits to provide a range of ROI values.

In the present study, the sensitivity analysis was limited to consideration of estimated cost ranges since there was equivalence in terms of general satisfaction with both types of leadership training. The following were included:

Training costs:

- historical 'status quo' £370 - £995 per person (online);
- EMLeaders £125 – £775 per trainee (Component 2 (20% programme)

If all trainees received leadership at the upper end of the range (£995 per person), this would increase the total cost of training to £1.67M, which is approximately £444,000 more than the equivalent cost of EMLeaders, and would represent a positive return on investment.

If trainees received other training at the lower end of the training (£370 per person), this would reduce the cost of training to £623,000, approximately £609,000 less than EMLeaders

We were unable to consider to what degree there is a potential for cost savings through increased efficiency following training.

Table 17. Intangible benefits EMLeaders programme vs historical 'Status quo'

	EMLeaders	**Historical**
FORMAL LEARNING *(EMLeaders = Notional 10%)*		
Description	Regional study days + EMLeaders material integrated EMLeaders specific training events	Regional study days
Short-term benefits	Indirect training in leadership for non-EML attendees	N/A
Longer-term benefits/*disbenefits*	Potential improved staff retention and job satisfaction	N/A
SELF-DIRECTED LEARNING *(EMLeaders = Notional 20%)*		
Description	Consistent national framework 9 e-learning modules (EM tailored) Structured content, but regional variation in add-on materials. Individual trainees differ in module completion patterns Local flexibility in add-ons developed for online programme.	Large variation (**Appendix 1**). Virtually all provided online only (one offers face-to-face option in London only) No consistent training content or framework. 4 main types of supplier: University courses; NHS & Hospital Programme; Military course; Other commercial courses
Short-term benefits	Equivalence in satisfaction	Equivalence in satisfaction
Longer-term benefits/*disbenefits*	Access to updated materials *No CPD accreditation* Potential fit in RCEM new curriculum	No access to updated materials University courses provide CPD
WORKPLACE LEARNING *(EMLeaders = Notional 70%)*		
Description	Potential to link to EMLeaders national framework Common leadership assessment tool Supported by Trust-based CoP* Local variation in supervised learning events, bite size learning, simulation exercises, materials. Potential to link to e-learning modules limited by inconsistent patterns of module completion.	Ad hoc link to individual's leadership training (if any) A few courses include workplace exercises.
Short-term Outcomes	N/A	N/A

Longer-term benefits/*disbenefits*	N/A	N/A
* Multi-professional, Trust-based Community of Practice (CoP) – may vary by Region/Trust/hospital		

10.6 Conclusions and Recommendations

10.6.1 Conclusions

EMLeaders is comparable to other leadership training previously received by EM physicians and is likely to offer a financial return on investment over time.

In the absence of national constraints, schools are able to design their own version of EMLeaders using the available material. Therefore, each school has implemented a slightly different version of EMLeaders and a definitive evaluation of the course nationally is not possible. There may be warranted variation between schools to meet differences in trainee numbers, the geographical area covered, and number of trainers, but there may be unwarranted variations which could be addressed following further investigation.

Our analysis was unable to determine whether EMLeaders has had a positive effect on attrition. This would require long-term follow up of trainees and may be difficult to assess because reasons for leaving the profession are likely to be varied. This evaluation has sought to use proxy measures of the effectiveness of EMLeaders in place of measures of resilience or people leaving the specialism. If a national programme can increase clinician resilience and this improves work-life balance, evidence confirms that this would be a positive-sum outcome.(16)

A national programme can update and tailor materials as required. It may be better able to consistently address general issues faced by women in healthcare leadership roles,(17) and especially provide training tailored to female careers and leadership in EM, as well as addressing equality, diversity and inclusion .(18-20)

Further benefits include the fact that the material developed is available at no additional cost to staff at any point in their career, meaning that there is an incentive to revisit material and reuse content in new situations (life-long learning).

10.6.2 Recommendations

A comparative evaluation of how EMLeaders is delivered across the different schools would inform HEE and RCEM of the similarities and differences between school and the associated strengths and weaknesses. It is recommended that consideration be given to a structured programme with modules taken by specific jobs and grades at specific points in their training, with some flexibility for local circumstances. An analysis of how schools are delivering EMLeaders would be useful to understand which aspects of the whole programme are most effective.

E-module data should be improved to show number of unique launches and perhaps include a unique identifier so that an individual can be associated with each line of data. It is

important to understand who has launched a module and whether they have completed it. If they have not completed a module, recording their progress would provide insight into where users are in the programme. This will help inform any trends around non-completion, indicative or content usefulness and value.

E-module data extraction should be recorded at a sub-regional and school level to understand how the e-modules are being used. Given that schools and regions have autonomy of delivery, data at these levels will be useful when carrying out a comparative analysis.

If HEE wish to understand the impact of EMLeaders on attrition rates and improved resilience, a structured data plan is required.

11. Overall Results, Recommendations and Limitations

The aim of the evaluation was to assess the extent to which the EMLeaders initiative has helped participants to develop and embrace the leadership skills required for personal and team resilience and examine the impact of the programme on staff retention and staff career choices. We had four areas of focus:

1. The impact, value and range of the EMLeaders training programme
2. Implementation of the EMLeaders Programme in the 12 schools across England
3. Impact of variations in implementation models on the primary aims of the programme
4. Commonalities and recommendations in order to build a model framework for delivery

Through the evaluation we used Kirkpatrick's 5 level framework to explore the following objectives and will seek to provide a concise summary against each in turn:

Provide an overview and mapping of activities provided by each of the 12 schools (considering the reach of EMLeaders)

The desk review provided an overview of School activities. However, we were asked not to interview Heads of Schools, due to the burden of their workload. This meant that some detail could not be gained. However, in summary we learnt that the following activities took place:

- 2018 A total of 48 introductory sessions were held, with 1046 attendees, of which 934 were trainees
- 2019 Pilot sessions took place at each of the 12 schools, involving 153 participants
- 2020 Nine e-learning modules were created and rolled out. Trainees completed a total of 7,637 e-modules between November 2020 and October 2021.
- 2021 Three national School development days took place, ten half day regional train the trainer days were held with consultants, three cohorts of consultant trainers were established with three development days per cohort, plus individual school events were held (eg webinars, online meetings, podcasts, face to face events)
- We conclude that a good level of 'reach' has been achieved by EMLeaders with survey responses received from across all regions of England and module completions showing good national spread.
- Some differences between roll-out in the final phase of embedding in normal practice, has meant that there was some inconsistency in reach between regions, especially for the more junior trainees who did not experience the pre-COVID sessions and the earlier pilots, both of which had high reach.

Assess the perceptions of the programme amongst trainees (considering reaction, learning and behaviour)

- Those undertaking EMLeaders training demonstrated statistically more positive ratings in the following seven statements, suggesting that EMLeaders training might have a positive impact on those specific aspects: I am knowledgeable about clinical

leadership; I know how to apply clinical leadership on the shop floor; I am empowered to make decisions in the workplace; I can manage the challenging environment of the ED; I am positive about my ability to influence the EM work environment; I am confident in my leadership and; I am confident in facilitating teams.

- Trainees identified that they had further developed their communication styles, had developed greater self awareness and a leadership lens.
- A number identified feeling more empowered, reflective and self-compassionate as a result of the programme
- The social learning aspect of EMLeaders was considered key to their engagement.
- Qualitative data suggested that less experienced trainees may find some of the content difficult to apply, depending on their specific role.
- Many trainees expressed fatigued and dissatisfaction with asynchronous self directed e-learning modules, finding the volume excessive
- A number of respondents wanted more face to face contact during the programme to share experiences and participate in practical activities.
- Largely a positive reaction to EMLeaders with clear examples of learning and behaviour change identified.

Assess the perceptions of the programme amongst all other beneficiaries (considering reaction, learning and behaviour)

- Respondents felt that EMLeaders had a high level of practical utility, with both consultants and trainees identifying specific areas of learning.
- Qualitative survey data confirmed that the impact on consultants and faculty members was particularly strong, with consultants feeling better able to support trainees as a result of the programme.
- Consultants valued their personal 'learning journey' and identified enhanced supervisory and teaching behaviours, and felt they had become more compassionate and balanced leaders as a result of EMLeaders.
- Respondents gave specific examples of behaviour changes in relation to managing conflict, challenging poor practice and providing improved leadership in the team, taking a more self care approach, consciously role modelling leadership behaviours and changing their communication styles.
- Largely a positive reaction to EMLeaders with clear examples of learning and behaviour change identified

Evaluate the design of effective curriculum and training delivery (including eLearning).

- A social learning approach underpinned the programme initially, though pandemic circumstances disrupted the original aspiration and recovery of this needs to be considered.
- Many trainees have expressed fatigued and dissatisfaction with reliance on asynchronous self directed e-learning modules,

- Work-based learning has yet to make impact in practice for many trainee respondents
- Communities of practice events have been impactful for those who have participated.
- Some trainees suggested hour-long sessions within regional training days were less effective for them than full leadership, day-long sessions.

Assess the impact of the COVID-19 pandemic on programme delivery.

- Survey responses indicated there was a dip in the staff engagement with the programme in 2020, with recovery evident in 2021, coinciding with COVID-19 peak and its dissipation.
- Programme delivery became reliant on on-line teaching/facilitation and asynchronous self directed e-learning modules. Face to face events ceased as per Government guidance at the time.

Assess staff attrition rate during the programme and compare with existing baseline data.

- An initial plan to incorporate rates of attrition was dropped early in the evaluation process when HEE and RCEM advised that rates for EM clinicians were not routinely available.
- Our analysis was unable to determine whether EMLeaders has had a positive effect on attrition. This would require long-term follow up of trainees and may be difficult to assess because reasons for leaving the profession are likely to be varied.
- This evaluation has sought to use proxy measures of the effectiveness of EMLeaders in place of measures of resilience and people leaving the specialism. If clinician resilience is increased and this improves their work-life balance, this would be a positive-sum outcome.
- A national programme may also be better able to not only address general issues for women in healthcare leadership,[Mousa, Boyle et al 2021] but also those in the context of female careers and leadership in EM.
- If HEE wish to understand the impact of EMLeaders on attrition rates and improved resilience, a structured data plan is required.
- Qualitative data suggested the EMLeaders programme contributed to doctors feeling valued within the specialty, and skills development led to staff feeling more knowledgeable and empowered. These factors may in the long-term support staff retention and intention to stay in EM.

Evaluate the cost-effectiveness and return on investment of a national programme.

- The three components of EMLeaders programme are likely to produce a number of non-monetary or intangible benefits which cannot be included in a financial return on investment analysis. An overview of these is shown in **Table 7** and compared to the historical 'status quo'.
- Although this Table includes some 'longer' term benefits, other important long-term benefits such as such as improved *quality, efficiency and responsiveness* are excluded.

- These are difficult to estimate in the EM setting but a *study design has recently been proposed that uses multiple quantitative and qualitative methods for evaluation of these.[Husebo and Olsen 2016].* In the case of the EMLeaders programme this would involve tracking trainees over time and this information is currently unavailable.

Provide recommendations based on the findings on how this programme could be tailored, adapted, and improved for EM and other specialties. (considering the results of the EMLeaders programme)

- The economic evaluation suggests that EMLeaders is comparable to other leadership training received by EM physicians and is likely to offer a financial return on investment over time through intangible benefits.
- We can ascertain that EMLeaders has been highly valued by consultants, faculty and trainees and consensus agreement exists on the need to sustain and further refine the programme.
- Variation does exist on the implementation of the programme across the 12 schools, and a set of recommendations can be made on ways to further develop and improve the impact of the programme as follows:
    - A comparative evaluation of how the EMLeaders programme is delivered between schools would elaborate on strengths, weaknesses and costs of different delivery models.
    - It may be more effective to align specific modules with particular job roles and grades
    - Module data could be more sophisticated so it is clearer when modules are completed, reasons for non-completion and relative value and use of content.
    - Specific study is needed in relation to EM workforce attrition to understand impact of push-pull factors.
    - To improve the experience of programme delivery, respondents suggest reducing the reliance on e-learning modules, increasing face to face contact, building in social interaction, increasing experiential learning activities and increasing involvement of senior post graduate doctors in training and consultants in workbased learning.
    - To ensure the EMLeaders programme is fully embedded in the curriculum, map the content to the curriculum, reduce the volume of learning materials, establish mandatory and optional elements

Limitations of the Evaluation

1. The desk review document data focused more on reaction to training and perceived learning, rather than actual longer term changes in behaviour as a result of EMLeaders.

2. Recency and recall bias could have affected survey responses and because of variation in the sample it is difficult to argue strongly that EMLeaders is better than other leadership courses on offer.
3. Respondents in the qualitative part of the evaluation were all willing volunteers and may have been more positive or negative about EMLeaders than those who did not volunteer to participate. Respondents may have had limited or inaccurate recollection of their experiences of the EMLeaders programme.
4. Data gaps meant that the economic analysis could not be fully achieved.

12. References

1. Lyons O, George R, Galante JR, Mafi A, Fordwoh T, Frich J, et al. Evidence-based medical leadership development: a systematic review. BMJ Leader 2021;5:206–13.
2. Anjum S. New Horizons in Emergency Medicine Teaching and Training. In: Alsheikhly A S, editor. Essentials of Accident and Emergency Medicine: IntechOpen; 2019.
3. Lateef F. Grace Under Pressure: Leadership in Emergency Medicine. J Emerg Trauma Shock. 2018;11(2):73-9.
4. O'Malley G, Marseille E, Weaver MR. Cost-effectiveness analyses of training: a manager's guide. Hum Resour Health. 2013;11:20.
5. April MD, Murray BP. Cost-effectiveness Analysis Appraisal and Application: An Emergency Medicine Perspective. Acad Emerg Med. 2017;24(6):754-68.
6. Husebo SE, Olsen OE. Impact of clinical leadership in teams' course on quality, efficiency, responsiveness and trust in the emergency department: study protocol of a trailing research study. BMJ Open. 2016;6(8):e011899.
7. Darbyshire D, Brewster L, Isba R, Body R, Basit U, Goodwin D. Retention of doctors in emergency medicine: a scoping review of the academic literature. Emerg Med J. 2021;38(9):663-72.
8. Hansen M, Harrod T, Bahr N, Schoonover A, Adams K, Kornegay J, et al. The Effects of Leadership Curricula With and Without Implicit Bias Training on Graduate Medical Education: A Multicenter Randomized Trial. Acad Med. 2022;97(5):696-703.
9. Trenaman L, Pearson SD, Hoch JS. How Are Incremental Cost-Effectiveness, Contextual Considerations, and Other Benefits Viewed in Health Technology Assessment Recommendations in the United States? Value Health. 2020;23(5):576-84.
10. Phillips J J. Return on investment in training and performance improvement programs. Boston: Butterworth-Heinemann; 2003.
11. Larsen T, Beier-Holgersen R, Meelby J, Dieckmann P, Ostergaard D. A search for training of practising leadership in emergency medicine: A systematic review. Heliyon. 2018;4(11):e00968.
12. Rosenman ED, Branzetti JB, Fernandez R. Assessing Team Leadership in Emergency Medicine: The Milestones and Beyond. J Grad Med Educ. 2016;8(3):332-40.
13. Althubaiti A. Information bias in health research: definition, pitfalls, and adjustment methods. J Multidiscip Healthc. 2016;9:211-7.
14. Ministry of Defence. Freedom of Information request. Ref: FOI2015/08851 2015 [Available from: Number of people signing up as army recruits, location of their training and total cost per recruit 2005 to 2015 (publishing.service.gov.uk).
15. Hershkovich O, Gilad D, Zimlichman E, Kreiss Y. Effective medical leadership in times of emergency: a perspective. Disaster Mil Med. 2016;2:4.
16. Fernandez Nievas IF, Thaver D. Work-Life Balance: A Different Scale for Doctors. Front Pediatr. 2015;3:115.
17. Mousa M, Boyle J, Skouteris H, Mullins AK, Currie G, Riach K, et al. Advancing women in healthcare leadership: A systematic review and meta-synthesis of multi-sector evidence on organisational interventions. EClinicalMedicine. 2021;39:101084.
18. Guptill M, Reibling ET, Clem K. Deciding to lead: a qualitative study of women leaders in emergency medicine. Int J Emerg Med. 2018;11(1):47.
19. Hobgood C, Draucker C. Gender Differences in Experiences of Leadership Emergence Among Emergency Medicine Department Chairs. JAMA Netw Open. 2022;5(3):e221860.
20. Hughes A, Boden D, Naravi M. Training in emergency medicine. Br J Hosp Med (Lond). 2018;79(9):504-6.

13. Appendices

Appendix 1 EMLeaders Programme in Context

Introduction

Becoming a doctor in Emergency Medicine takes a number of years. Following the completion of an undergraduate medical degree, graduates embark on a 2 year integrated training programme. This is comprised of foundation year 1 and foundation year 2. Following this, doctors in training begin their specialty training which takes a further four years.

During this time doctors in training complete the Acute Care Common Stem (ACCS) programme, rotating through 6 month placements in emergency medicine, internal medicine, intensive care medicine, and anaesthetics, with two further years in their main specialty.

The following link sets out the components of the ACCS route ; 2021 Curriculum for ACCS Training v1.1.pdf (rcoa.ac.uk) The ACCS training programme allows doctors to enter further higher specialty training in emergency medicine.

Those doctors specialising in EM will follow the Royal College of Emergency Medicine 2021 Curriculum, which sets out what is required to be a specialist in EM in the UK. RCEM_Curriculum_2021_Master.pdf Doctors receive a certificate of completion of training (CCT) at the end of their specialisation training.

All doctors in training for their chosen specialty must also work towards the postgraduate Generic Professional Capabilities (GPCs) framework, which gives a detailed description of the interdependent essential capabilities that underpin professional medical practice in the UK. Generic Professional Capabilities Framework - RCEMCurriculum

This framework has been created by the General Medical Council to describe the fundamental, career-long, generic capabilities required of every doctor. The GPCs span

- professional values and behaviours
- professional skills
- professional knowledge.

Embedded within are a specific set of capabilities relating to leadership.
Generic Professional Capabilities Framework - RCEMCurriculum

There are also a specific set of Specialty Learning Outcomes - RCEMCurriculum

To provide a clear structure to leadership development, the Royal College of Emergency Medicine have created the EMLeaders framework which sets out the EM leadership knowledge, skills, behaviours, attitudes and competencies, referenced against the different stages of training that make up core and higher EM training programmes. EM Leaders Programme | RCEM

EMLeaders Framework

The EMLeaders Framework is structured into 5 areas of clinical leadership

- EMLeader Skills
- Working in teams
- Managing the emergency service
- Growth and collaboration
- Developing excellence within your team

The framework itself can be accessed here EMLeaders_Framework_vs.3_100521.pdf (rcem.ac.uk)

The programme itself is composed of three main components:

- **Component 1 (70%): On the job 'shop-floor' training events** (i.e. bite size learning, supervised learning events, simulations exercises, leadership assessment tool) – supported by a multi-professional, Community of Practice (CoP)
- **Component 2 (20%): Self-directed learning** (i.e. nine e-learning modules plus further resources developed locally for programme)
- **Component 3 (10%): Formal learning** (i.e. Regional study days with EMLeaders integrated, separate EMLeaders specific training events).

The e-learning modules are set out below and provide learners with theoretical materials, reading resources, videos, interactive activities and a reflective practise worksheet.

EMLeaders e-learning Modules

EMLeaders Stage 1 core sessions	EMLeaders Stage 2 follow on sessions
Leading Self	Leading Change
Leading Systems	Leading Culture
Leading Teams	Leading People
	Leading Quality
	Leading Service
	Leading Strategy

Appendix 2 List of Leadership Courses Identified by Survey Respondents

N=90

Record No	Type	Response
1	Health	Trust level training at UHBW Bristol
8	Health	Medical leader in practice Organised by AQUA
13	Health	Glass lift leadership training -female Dr's leadership programme I think funded by HEE
14	Health	Trust course Flow coaching academy
16	Health	I had training with world academy of medical leadership UK
18	Health	PGC in Clinical Leadership Academic wales Leadership Programme
20	Health	NHS Senior clinical leadership, eCLIPS
25	Health	Middle-grade/Tier 4 Development masterclasses organised by my Local ED
29	Health	Trust local leadership development programme
30	Health	NHS Leadership programme
31	Health	Internal leadership course for London North West Hospitals NHS Trust
32	Health	Management and Leadership training - HEE online modules EM Leadership modules(RCEM) - HEE online modules
40	Health	Fit to Lead BAMM LEAN fundamentals of leadership Faculty of medical leadership and management meetings
41	Health	E learning course on medical leadership.
43	Health	UHCW trust leadership programme- senior staff
45	Health	Courses for leadership & management offered to SAS doctors by the trust?
56	Health	HENW module in clinical leadership in ST6

57	Health	BMA leadership event
66	Health	Lean leadership Currently taking part. In trust training
76	Health	BMA
77	Health	NHS Leadership Academy award level 5
78	Health	Attended regional EM leaders workshops
79	Health	Leadership training at end of registrar training. Ongoing coaching
80	Health	Online Medical Leadership and management distance learning course
89	Health	AQUA
7	Military	Military
12	Military	Military - general staff induction course.
17	Military	Regular Army Commissioning course, Royal Military Academy Sandhurst
33	Military	Royal Military College Sandhurst
48	Military	Leadership and Management Programme (NHS Education for Scotland) Royal Navy: Naval Analysis Course, Junior Officer Leadership course 2
61	Military	Regular Army Commissioning Course, Royal Military Academy Sandhurst
87	Military	I am an officer in the Army reserves which includes 2 weeks at Sandhurst, classed as a leadership academy - obviously with a focus on military leadership.
3	University	Executive Master's in Medics Leadership, Bayes Business School, City, University of London with additional Level 7 Qualification in leadership & management, Chartered Management Institute.
4	University	Oxford courses
6	University	Oxford training course
10	University	PGCert University of Lancaster AQUA
11	University	Leadership and Management course arranged for SAS doctors at my trust Professional & Generic skills course from Plymouth University
15	University	Leadership and innovation module provided by the University of the West of England

21	University	Leadership programme with Imperial business school
22	University	Masters Educational Leadership
23	University	MBA module. others I've forgotten
24	University	Keele leadership course, HEA fellowship training
26	University	MSc leadership module
27	University	Leadership and mentoring modules within my MA
36	University	Leadership and Management in Health University of Washington professional development course
44	University	Leadership BSc module. Liverpool John Moore's
46	University	Christ Church University Leadership module at Masters level East Kent hospitals NHS in-hospital course - Clinical Leadership
49	University	Keele leadership course
52	University	Within MSc pathway - Module on Leadership
55	University	MBA
58	University	High impact leadership Training at Cambridge university
65	University	Leadership and Management in Health course at the University of Washington
69	University	Post grad certificate in health service management
70	University	Leadership Masterclass at Teesside University
82	University	Certificate of Leadership and Management in health and social care (University of West England)
86	University	Keele university
2	Various	Just completed the leadership plus fellowship
5	Various	Online training
9	Various	Kings fund
19	Various	Online via e-LfH & multiple Webinars & Study days
28	Various	Leadership course
34	Various	Multiple leadership roles including appraisal and organ donation leadership roles.
35	Various	Kings Fund Senior Clinical Leaders Programme.

37	Various	I don't really remember. Some Oxford course.
38	Various	With my supervising Consultants.
39	Various	Leadership workshops and courses.
42	Various	1:1 leadership coaching
47	Various	Course
50	Various	One to one coaching
51	Various	Do not remember
53	Various	Management and leadership course by ISC Medical
54	Various	Leadership course
59	Various	Kings fund
60	Various	Private course
62	Various	FMLM
63	Various	Leadership one day workshop in EUSEM Eclipse leadership program
64	Various	Leading an Empowered Organisation course
67	Various	On line modules BMJ Learning
68	Various	FQIM
71	Various	ULead
72	Various	Coursera website
73	Various	ILM leadership certificate with Cornwall County Council
74	Various	E-LfH
75	Various	Em leadership training programme in India
81	Various	Management course, it covers leadership related matters
83	Various	Leading an empowered organisation
84	Various	eCLIPS
85	Various	Local Leadership course
88	Various	ETC, December 2021

		Nurse leadership course 2015
90	Various	local NIMDTA event

#Health= 25 @ NHS, Trust etc Programmes (Incl AQUA)
#Military= 7 @ Various Military training
#University = 24 @ Various University courses
#Various = 34 @ Various other courses

Appendix 3 Copy of the Online Survey

Emergency Medicine Leadership Survey

Introduction & Consent

EVALUATION OF EMERGENCY MEDICINE LEADERSHIP

The EMLeaders programme was developed in partnership between The Royal College of Emergency Medicine (RCEM), Health Education England (HEE) and NHS Improvement/England (NHSI/E). The purpose of the programme is to improve the quality of leadership skills being deployed in the Emergency Medicine (EM) operational environment and aims to ensure that those working within the Emergency Department (ED) are:

- more knowledgeable about clinical leadership and how to apply it on the shop floor.
- empowered to make decisions in the workplace and manage the challenging environment of the emergency department.
- supported by the School leadership faculty with their learning and are enabled to feed back personal experiences or concerns.

This brief questionnaire has been developed as part of an independent evaluation of the EMLeaders programme, commissioned by HEE. As part of this evaluation, we are also interested in hearing from those who have undertaken other leadership training and those who have not yet had leadership training. The evaluation is being conducted by a team from the Centre for Healthcare Research at Coventry University.

PARTICIPANT INFORMATION STATEMENT

The aim of this questionnaire is to evaluate the EMLeaders programme, other leadership training and the experience of those who have not yet undertaken leadership training.

You have been selected to take part in this questionnaire because you were identified by the RCEM as a member and/or as an attendee at EMLeaders events. Your participation in the survey is entirely voluntary, and you can opt out at any stage by closing and exiting the browser. Please note that data entered up to the point of exiting the browser will still be included in analysis. There are no implications if you do not complete the survey.

If you are happy to take part, please answer the following questions relating to your experience of the programme and its impact. The survey should take approximately 10 minutes to complete.

Your answers will be treated confidentially and the information you provide will be kept anonymous in any research outputs/publications. Your data will be held securely by XXXXX on a password-protected Jisc Online Survey account and password-protected Coventry University One Drive account. All data will be held for six years and deleted by 31st December 2027. The evaluation project has been reviewed and approved through the formal Research Ethics procedure at Coventry University.

For further information, or if you have any queries, please contact the lead for this part of the evaluation XXXXX. If you have any concerns that cannot be resolved through the lead, please

contact XXXXX. Thank you for taking the time to participate in this survey. Your help is very much appreciated.

I consent to the information I provide being used to evaluate the EMLeaders programme. *Required

- Yes

I have read and understood the above information. I understand that, because my answers will be fully anonymised, it will not be possible to withdraw them from the study once I have completed the survey. I agree to take part in this questionnaire survey. I confirm that I am aged 18 or over. *Required

- Yes

Occupational Details

Are you currently working in Emergency Medicine (EM)? * Required

- Yes
- No
- If 'Yes' please specify your role _____

Please select which career grade applies to you *Required

- Consultant
- Trainee ST1
- Trainee ST2
- Trainee ST3
- Trainee ST4
- Trainee ST5
- Trainee ST6
- SAS Doctor (Staff Grade, Associate Specialist and Specialty Doctors)
- Physician Associate
- Advanced Care Practitioner
- Locum Consultant
- Other
- If you selected Other, please specify: _____

Have you been involved with supporting participants on EMLeaders training events? *Required

- Yes
- No

Screening Question 1

Have you undertaken EMLeaders training events? *Required

- Yes
- No

Screening Question 2

Have you undertaken other external leadership training? *Required

- Yes
- No

EMLeaders Programme Evaluation

Within which HEE EM School region(s) did you undertake your EMLeaders training events? (select as many as are relevant) *Required

- East Midlands
- East of England
- Thames Valley
- West Midlands
- Northeast
- Northwest & Mersey
- Yorkshire & Humber
- London
- Kent, Surrey & Sussex
- Peninsula
- Severn
- Wessex
- I'm not sure

In which year did you first undertake EMLeaders training? *Required

- 2021
- 2020
- 2019
- I'm not sure

Which of the following aspects of EMLeaders training have you participated in? (select as many as are relevant) *Required

- Faculty development days
- Face to face study days
- E-learning modules
- Communities of practice
- Integrated into local or regional teaching activities

There are currently 9 EMLeaders modules available on the e-Learning for Health (e-LfH) platform. These may have been delivered in alternative formats (e.g. face-to-face study days) in earlier iterations of the programme. Please select which of these modules/study days you believe you have undertaken (select as many as are relevant). *Required

- Leading Self (core)
- Leading Teams (core)
- Leading Systems (core)
- Leading Service
- Leading Culture
- Leading Change
- Leading Quality
- Leading People
- Leading Strategy (previously called 'Leading Evaluation')
- None of these

Have you made a decision not to engage in further EMLeaders training? *Required

- Yes
- No
- If 'Yes' please specify why _____

Please read each of the following statements and select the strength of your agreement or disagreement with each. *Required

Please don't select more than 1 answer(s) per row.

Please select at least 16 answer(s).

	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
I am knowledgeable about clinical leadership						
I know how to apply clinical leadership on the shop floor						
I am empowered to make decisions in the workplace						
I can manage the challenging environment of the ED						

I am supported by the HEE EM School Faculty with my learning and development as a leader						
I am enabled to feed back personal experiences or concerns						
I am positive about my ability to influence the EM work environment						
I am confident in my decision making						
I am confident in my leadership						
I am confident in facilitating teams						
I have positive wellbeing at work						
I am enthusiastic about pursuing a career						
I listen effectively to other people within the ED						
I can recognise the differing demands within the ED						
I can adapt to the differing demands within the ED						
I would recommend the EMLeaders training that I						

undertook to my peers						

Since taking part in the EMLeaders training… How has your knowledge of leadership in EM changed? *Required _____

Since taking part in the EMLeaders training... How has your confidence and/or competence as a leader changed? *Required _____

Regarding the content and delivery of the EMLeaders training… What worked well? *Required _____

Regarding the content and delivery of the EMLeaders training… What would ideal leadership training look like (content and delivery)? *Required _____

We are very interested in speaking to participants in more detail about their experience of the EMLeaders programme, either 1:1 or as part of a focus group (this will be online via an online forum such as MS Teams or Zoom). If you would be happy to discuss the programme with the evaluation team, please add your details below:

I am happy to be contacted by the evaluation team discuss the EMLeaders programme. *Required

- Yes
- No
- Name / email / telephone _____

Other Leadership Training Evaluation

Please specify what other external leadership training you have undertaken *Required _____

Within which HEE EM School region(s) do you currently work? (select as many as are relevant) *Required

- East Midlands
- East of England
- Thames Valley
- West Midlands
- Northeast
- Northwest & Mersey
- Yorkshire & Humber
- London
- Kent, Surrey & Sussex
- Peninsula
- Severn
- Wessex

- I’m not sure

Please read each of the following statements and select the strength of your agreement or disagreement with each.

Please don't select more than 1 answer(s) per row.

Please select at least 16 answer(s).

	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
I am knowledgeable about clinical leadership						
I know how to apply clinical leadership on the shop floor						
I am empowered to make decisions in the workplace						
I can manage the challenging environment of the ED						
I am supported by my colleagues with my learning and development as a leader						
I am enabled to feed back personal experiences or concerns						
I am positive about my ability to influence the EM work environment						
I am confident in my decision making						

I am confident in my leadership						
I am confident in facilitating teams						
I have positive wellbeing at work						
I am enthusiastic about pursuing a career						
I listen effectively to other people within the ED						
I can recognise the differing demands within the ED						
I can adapt to the differing demands within the ED						
I would recommend the external leadership training that I undertook to my peers						

Since taking part in your external leadership training… How has your knowledge of leadership in EM changed? *Required _____

Since taking part in your external leadership training… How has your confidence and/or competence as a leader changed? *Required _____

Regarding the content and delivery of your external leadership training… What worked well? *Required _____

Regarding the content and delivery of your external leadership training… What would ideal leadership training look like (content and delivery)? *Required _____

Evaluation

Within which HEE EM School region(s) do you currently work? (select as many as are relevant) *Required

- East Midlands
- East of England
- Thames Valley
- West Midlands
- Northeast
- Northwest & Mersey
- Yorkshire & Humber
- London
- Kent, Surrey & Sussex
- Peninsula
- Severn
- Wessex
- I'm not sure

Please read each of the following statements and select the strength of your agreement or disagreement with each.

Please don't select more than 1 answer(s) per row.

Please select at least 14 answer(s).

	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
I am knowledgeable about clinical leadership						
I know how to apply clinical leadership on the shop floor						
I am empowered to make decisions in the workplace						
I can manage the challenging environment of the ED						
I am enabled to feed back personal experiences or concerns						

I am positive about my ability to influence the EM work environment						
I am confident in my decision making						
I am confident in my leadership						
I am confident in facilitating teams						
I have positive wellbeing at work						
I am enthusiastic about pursuing a career in EM						
I listen effectively to other people within the ED						
I can recognise the differing demands within the ED						
I can adapt to the differing demands within the ED						

If you were to undertake leadership training… What would ideal leadership training look like (content and delivery)? *Required _____

Demographic Characteristics

What ethnic group do you identify as?

- Asian/Asian British
- Black/African/Caribbean/Black British
- Mixed/Multiple ethnic groups
- Other ethnic group
- Prefer not to say
- White

What ethnicity do you identify as?

- White English / Welsh / Scottish / Northern Irish / British
- White Irish
- White Gypsy or Irish Traveller
- Any other White background
- White and Black Caribbean
- White and Black African
- White and Asian
- Any other Mixed / Multiple ethnic background
- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background
- African
- Caribbean
- Any other Black / African / Caribbean background
- Arab
- Any other ethnic group
- Prefer not to say

What is your sex (a question about gender identity will follow)?

- Male
- Female
- Prefer not to say

Is your gender the same as the sex you were assigned to at birth?

- Yes
- No
- Prefer not to say

What is your gender identify? Please specify

- Man
- Woman
- Non-binary
- Gender fluid
- Prefer not to say
- Prefer to self-describe _____

Do you consider yourself to have a seen or unseen disability? We define disability as an ‘impairment that has a substantial, long-term adverse effect on a person’s ability to carry out normal day-to-day activities’

- Yes
- No
- Prefer not to say

If yes, how would you describe your disability or impairment? Tick all that apply

- Developmental
- Learning
- Mental health
- Physical
- Sensory
- Neurodiverse
- Not applicable
- Prefer not to say
- Other
- If you selected Other, please specify: _____

End

Thank you very much for completing this survey

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