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CENTRE FOR HEALTH
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LEADERSHIP



Health Education England

An evaluation of the Health Education England South West Clinical Leadership Mentors programme

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**Iain Snelling
Hilary Brown
Louise Hardy
Samantha Cockburn
Lara Somerset**

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One page summary

Health Education England South West developed a Clinical Leadership Mentor (CLM) programme in 2018, with a mentor appointed in every Trust. The role is to support the leadership development of junior doctors, by working directly with them and with Trust and education leaders. This is a summary of the evaluation. Significant progress was made, but was constrained by the limited time available to the posts.

The GMC has revised curricula requirements for postgraduate training in line with their Generic Professional Capabilities (GPC) framework. Although leadership development for trainees has been acknowledged for many years, from 2020, **leadership, teamwork, patient safety, and quality improvement will formally be part of training provided by NHS Trusts, and will be assessed alongside other clinical and non-clinical skills and knowledge.** Although there is no evidence that has directly linked the quality of medical education provided by a Trust to specific outcomes, there are many reasons to suggest such as link.

The evaluation had a formative design, with an aim to work with CLMs to support the development of their roles. CLMs were appointed with a notional allocation of half a programmed activity (2 hours) per week. The group of CLMs met regularly, supported by an external facilitator, to share learning. Evaluation methods included interviews, surveys, and reports by the CLMs. The most significant activities of the mentors were:

Key responsibility in job description	Summary
To identify suitable leadership roles and projects, and to lead on overseeing and supporting medical trainees as they engage in these activities.	This has been widely developed by CLMs. Some have highlighted major opportunities such as Chief Registrar posts, or Leadership Fellowships, while others have concentrated on local roles such as Junior Doctors committees, and developing representative roles, with some certification. Matching of trainees to projects is also a key activity in this area.
Develop and support participation by trainees in patient safety issues. Develop and support multi-professional Quality Improvement (QI) work with the Trust QI Lead.	This is the area that has clearest progress in the reports, with all CLMs making progress, particularly with Quality Improvement initiatives, which are routinely part of training programmes. Some CLMs described initiatives by Trust's QI teams to proactively engage with trainee medical staff. There were a number of specific initiatives in this area.
Develop and support workplace invitations for leadership learning.	This has been a key area of activity with most CLMs highlighting their role in this area. Several CLMs have designed and delivered leadership training.

The main findings of the evaluation were:

- There was significant variation within the CLM group, relating to their own role and experience, and the size and context of Trust. There were differences between CLMs who worked mainly with individual trainees, and those who worked with those who supported trainees, such as educational supervisors.
- Perceptions of the CLMs were positive, among trainees and educational supervisors.
- CLMs worked with existing groups within Trusts and their own networks to support their activity
- Trainees are engaged with the idea of leadership as part of their clinical practice.
- 80% of trainees surveyed had undertaken a Quality Improvement activity
- 86% of trainees believe that the environment for leadership development varies between Trusts
- Educational supervisors are engaged with leadership, and welcome support from CLMs.
- Half of educational supervisors understand the leadership development opportunities that are available.
- A third of educational supervisors are fully prepared for curriculum changes to implement GPC

Although this is a formative evaluation, there is evidence to support the continuation and development of the role, with support from trainees, educational supervisors, and Trust Managers. Roles should have freedom to develop locally, and CLMs should consider how best to share their experiences across the group.

Four page summary

Health Education England South West developed a Clinical Leadership Mentor programme in 2018, with a mentor appointed in every Trust. Their role is to support the leadership development of junior doctors, by working directly with them, and with Trust and Education leaders.

The organisation of medical training involves a complex set of relationships between the General Medical Council (the regulator of the medical profession), the Medical Royal Colleges who develop curricula to meet GMC requirements, Health Education England who are responsible for medical training, including the employment of junior doctors, and Trusts who provide training placements. Medical Trainees provide a key part of the medical workforce in Trusts, and a significant number of Consultant staff are involved in their training in a formal capacity.

Postgraduate medical education in the UK is going through a number of significant changes. In 2017 the GMC published the Generic Professional Capabilities (GPC) framework following a major review of medical training. The GMC requires that the GPC framework will be reflected in revised postgraduate curricula by 2020, although this process may be delayed by the Covid-19 pandemic. The GPC framework has three fundamental domains relating to professional knowledge, skills, and values and behaviours, and six themed domains. Among the themed domains are *leadership and team working*, and *patient safety and quality improvement*. Although the GMC in their role of individual professional regulator has been concerned with leadership and teamwork for many years, the revised curricula will mean that for the first time, **leadership, teamwork, patient safety, and quality improvement will formally be part of training provided by NHS Trusts, and will be assessed alongside other clinical and non-clinical skills and knowledge.**

This change provides opportunities for Trusts, who have expertise and capacity in all these areas, to engage with the medical workforce – trainees and permanent staff – to support medical training. There is a strong and developing evidence-base showing the contribution of junior doctors to quality improvement and patient safety, and the importance of leadership at all levels in improving services. Some evidence is summarised in box 1.

To help enable this potential developing partnership, in 2018, HEE South West Deanery established new posts of **Clinical Leadership Mentors (CLMs)** in all 19 Trusts in the South-West. CLMs are “responsible for overseeing the process and progress of leadership development amongst the trainees within their Trust/LEP.” CLMs are engaging with trainees, trainers, and trusts in their role, although they are constrained by the time that is available. The Deanery has only been able to fund posts at 0.5 P.A. (around 2 hours per week), although CLMs gave many more hours to their roles.

The Clinical Leadership Mentor scheme evaluation

This is a formative evaluation of the Health Education England South West Clinical Leadership Mentors (CLM) scheme. The group of Clinical Leadership Mentors have met regularly, supported by an external facilitator, to share their learning. The evaluation aims included identifying the activities undertaken by mentors (which are explained in Box 2, alongside their specific duties), exploring perceptions about their role, held by the mentors themselves, trainees and within organisations, and to consider the effectiveness of their activities.

Methods were a total of 43 interviews with Clinical Leadership Mentors, Educational Supervisors, Trainee Medical Staff, and Trust Managers, surveys of Trainee Medical Staff (n=112), and Education Supervisors (n=170) in 8 Trusts, and documentary analysis. Surveys were undertaken in Trusts (4 Mental health, 4 acute) who wanted to use them for local development of the role.

Box 1: The contribution of junior doctors to service improvement and patient safety

There have been no studies that have directly linked the quality of medical education provided by Trusts, to specific outcomes at the clinical or organisational level. However, there are reasons to suggest such a link:

- Junior doctors can make significant contributions to patient safety and service improvement. In one study more than 90% had ideas for improvement, but only 11% had had an idea implemented (Gilbert *et al.*, 2012). In another study the figure was 28% (Mendis and Paton 2014).
- Higher engagement of medical staff is associated with higher quality care, and the case for engagement of junior doctors particularly is widely made (Aggarwal and Swanwick 2015)
- There is a significant literature exploring the links between patient safety and the wellbeing of healthcare staff (Hall *et al* 2016), and the mental health of doctors (Kinman and Teoh 2018). Poor wellbeing is associated with poor quality care.
- Recruitment of trainees is likely to be affected by a Trust’s medical education and management processes. Less than half of doctors completing their foundation years training proceed directly into core specialty training with most taking a one year or a two year break (Cleland *et al* 2019).
- A supportive culture and working conditions are highly significant in the training post application choices of F2 doctors, although geographical location in the most important (Scanlan *et al* 2018)
- The GMC published a major review in 2019: Caring for doctors, caring for patients (West and Coia 2019) identifying the importance of the healthcare environment and compassionate leadership, with recommendations for all organisations.

There was significant variation within the group of CLMs, on a number of dimensions, including their own role and experience, and the size and context of Trust. As a result, the role was enacted in many different ways, although there were a number of common elements derived from the job description. In particular whether the CLMs worked with ‘the few or the many’ was identified as a key element of difference – whether it was possible to work with individual trainees, or whether activity was better directed at others who support trainees. The limited time available to CLMs required prioritisation of approaches. Many CLMs engaged with a range of colleagues to create informal support groups to develop the role. Perceptions of the CLMs were positive, although not all participants in the evaluation knew who their CLM was or understood their role. For those unable to comment on the basis of experience, the role itself was appreciated.

Trainees’ attitudes to leadership, and experiences

A key issue identified in the CLM group was the extent to which trainees considered themselves as leaders, which would give part of the context for leadership development. There has been some evidence that trainees tended to see leadership in hierarchical terms. Our survey suggested higher levels of engagement with leadership:

Trainees’ attitudes to leadership	% Agree
I consider myself a leader	78%
Leadership is important as a part of my clinical practice	94%
Leadership requires a senior position	38%

Trainee doctor:
“certainly in my ST1, ST2, years, it was never talked about or mentioned at all and then as you become a registrar people start talking about ‘oh, you’re going to be a registrar soon and you have to think about what kind of leader you want to be.”

The number of trainees who considered themselves a leader increased as seniority increased, with the transition to registrar being particularly significant. There was variation in the extent to which trainees felt supported in leadership development and had access to opportunities:

Leadership development experiences of trainees	% Agree
I have discussed leadership with my educational supervisor in the past six months	51%
I have access to leadership development opportunities in my current role.	65%
I feel supported by the Trust in my leadership development	54%
The environment for leadership development varies between the Trusts	86%
I have further leadership development need in the next 12 months	92%

Trainee doctor

“[Doing a] Q.I. project was good but felt that I had to drive this by myself and was not supported by the trust much to do this. This felt pretty different to my experience [elsewhere] where I was supported in QI by regular meetings with a QI fellow or full time QI employee. ... Consultants were also keen on QI and encouraged trainees to take part.”

That 86% of trainees believed that the environment for leadership development varies between Trusts is significant and offers a clear opportunity for improvement. However, a positive finding of the surveys was that 80% of trainees had undertaken a Quality Improvement activity, although not always to maximum effect as the quote above illustrates.

Box 2: activities of Clinical Leadership Mentors

Key responsibility in job description	Summary
To identify suitable leadership roles and projects within and around the organisation and to lead on overseeing and supporting medical trainees as they engage in these activities.	This has been widely developed by CLMs, with some variation. For example, some have highlighted major opportunities such as Chief Registrar posts, or Leadership Fellowships, while others have concentrated on local roles such as in Junior Doctors committees, and developing representative roles with the Trust, with some certification. Matching of trainees with Trust projects is also a key activity in this area.
Develop and support a buddying scheme allowing trainees to shadow various leaders and managers within the Trust /LEP at meetings and in management activities.	This was reported in 10 Trusts, with successful buddying with Executive Directors and Graduate Management Trainees. In some Trusts limited interest was noted. There was a distinction in some reports between buddying and shadowing, with buddying being a longer term relationship, and shadowing being shorter term, for perhaps a specific day or meeting.
Develop and support participation by trainees in patient safety issues / RCA (root cause analysis). Develop and support multi-professional Quality Improvement (QI) work with involvement of the Trust QI Lead.	This is the area that has clearest progress in the reports, with all CLMs making progress, particularly with Quality Improvement initiatives, which are routinely part of training programmes. Some reports described initiatives for the Trust’s QI team to proactively engage with trainee medical staff. There were a number of specific initiatives.
Highlight and embed leadership opportunities at Trust/LEP Induction	Induction is in some Trusts a pressurised event, and so direct involvement has not always been possible. In some large Trusts there are a large number of events, and so prioritisation is necessary.
Work with relevant Specialty Tutors, clinical service leaders to help facilitate leadership opportunities within the specialties/departments.	In this area there has been a variety of approaches, with engagement of different groups of colleagues. Some CLMs who have been in Trusts a long time or hold other appointments highlighted the role of personal networks.
Support trainees’ representation at multi-professional Senior Team meetings.	The link of this action with the buddying scheme was made, as was the opportunities offered to specific posts such as Chief Registrars.
Develop and support workplace invitations to leadership learning opportunities.	This has been a key area of activity with most CLMs highlighting their role in this area. Several CLMs have designed and delivered leadership training. Two CLMs have personally mentored a number of trainees.
Participate in the development of a Leadership Mentor network across the SW region	The Leadership mentors network is widely supported, through the meetings and through a WhatsApp group.
Develop and support a forum for local clinicians to talk to trainees about leadership and reflect on their leadership and managerial roles.	This specific objective has been addressed mainly by working with existing groups and networks rather than proposing a new forum.

Educational Supervisors

Educational Supervisors will be key to implementing the new curricula reflecting the Generic Professional Capabilities. Although there was a very high agreement with leadership being part of medical training, and high levels of belief that Education Supervisors had the skills and knowledge to take on an enhanced role in the new curricula, only half understood the leadership development opportunities available to trainees, and only a third were fully prepared for curriculum changes.

	% agree
Leadership is an important element of medical training	98%
Leadership development should be part of medical training in all years of training	89%
Leadership development should only be part of medical training for senior trainees	26%
I discuss leadership with trainees	82%
I have the knowledge required to discuss leadership and leadership development	70%
I have the supervisory skills required to discuss leadership and leadership development	74%
I understand the opportunities which are available for trainees in leadership development.	53%
I am fully prepared for the curriculum changes to implement Generic Professional capabilities	34%

Educational supervisor on the CLM role

"...trainers of course come from all backgrounds; some of them are good leaders and some of them are not, therefore having somebody outside of your trainer that you can go to would seem quite useful. It would also seem quite useful for ... some of the consultants to go to them for advice on leadership and advice on how to help their trainees as well, because we don't always know what's available and what might help all our trainees."

Educational supervisors were asked what specific CLM roles would be useful. All suggestions had 'approval ratings' above 90% including:

To identify suitable leadership projects for trainees	93%	To identify suitable leadership roles for trainees	95%
To set up a system for trainees to shadow various leaders and managers	93%	Develop fora for local clinicians to talk to trainees about leadership	90%

Summary

Although this is a formative evaluation, there is evidence to support the continuation and development of the role, with support from trainees, educational supervisors, and Trust Managers. Roles should be less specified, with more freedom to develop roles locally. The Clinical Leadership Mentors group has been highly valued, although the time commitment is high. Clinical Leadership mentors should review how they work together to share good practice. Issues for further consideration identified in the evaluation include:

- Understanding the specific issues that influence the organisational context for medical training seems like a priority area for Clinical Leadership Mentors.
- Connections between the wellbeing agenda, recruitment and retention, and the environment for leadership development were made in the evaluation. Developing this connection may encourage Trusts to increase the resources available to the Clinical Leadership Mentor role.
- There may be scope for innovative approaches in the leadership development of trainees, for example the involvement of senior trainees in mentoring more junior trainees, and the engagement of senior clinicians, particularly those close to or after retirement.
- The high percentage of trainees engaging in Quality Improvement is very encouraging, but other forms of leadership work and learning might also be encouraged in medical curricula and annual assessment.

Introduction and background.

This is the report of the evaluation of the South West Clinical Leadership Mentors programme, which was established in 2018. Health Education England South West appointed a mentor in each of the 19 Trusts in the Region (which includes the Severn and Peninsula Deaneries). These roles are appointed on a sessional basis of 0.5 of a Programme Activity (PA), which is two hours per week. The job description of the role, which is appointed by and accountable to the Director of Medical Education in each Trust, summarises the role:

“All trainee doctors should be encouraged to take up appropriate leadership and management opportunities throughout their training in accordance with GMC guidance. The [Clinical Leadership Mentor] will be responsible for overseeing the process and progress of leadership development amongst the trainees within their Trust/LEP. They will work in close partnership with the Director of Medical Education (DME), the Medical Director, Director of Human Resources/Organisation Development and the NHS Leadership Academy South West to engage and develop a creative portfolio of leadership and management development opportunities through postgraduate medical training.”

Postgraduate medical education in the UK is going through a number of significant changes. In 2017 the GMC published the Generic Professional Capabilities (GPC) framework (GMC 2017), following a major review of medical training (Greenaway 2013), and it is in this context that the job description is referring to. The GMC requires that the Generic Professional Capabilities framework will be reflected in revised postgraduate curricula by 2020, although this process may be delayed by the Covid-19 pandemic. The GPC has three fundamental domains relating to professional knowledge, skills, and values and behaviours, and six themed domains. Among the themed domains are *leadership and team working*, and *patient safety and quality improvement*. Although the GMC in their role of individual professional regulator has been concerned with leadership and teamwork for many years, and there are regulatory requirements for doctors relating to management and leadership, the revised curricula will mean that for the first time, leadership, teamwork, patient safety, and quality improvement will formally be part of training provided by NHS Trusts, and will be assessed alongside other clinical and non-clinical skills and knowledge.

The Academy of Medical Royal Colleges and GMC (2017) subsequently published guidance on implementation for colleges and faculties. The nine domains must be directly identifiable within curricula, and there is guidance for trainers in assessment of the professional capabilities. The guidance says that the ‘inclusion of generic professional capabilities within the new standards for curricula is a significant change in the approach to formalising professionalism within training’. The key role of trainers is discussed, and ‘at deanery and LETB level, there should be specific faculty engagement cascading down from training programme directors, through educational supervisors and then clinical supervisors.’ The development of the role of the Clinical Leadership Mentors is part of this Deanery engagement. This emphasis on leadership in training is not new, although its strengthening in curricula is.

This is important context for the Clinical Leadership Mentors programme, because there are many initiatives at local, regional and national levels that are working to improve leadership development for doctors, and specifically those in training. For example, the Faculty of Medical Leadership and Management was established by the Medical Royal Colleges in 2012, the Royal Colleges themselves offer leadership development programmes, and there are many leadership fellowships available, both in training and out of training. In the South West there is an active group of leadership fellows who among other things organise very successful conferences. Health Education England (2018) published local implementation plans to enhance the leadership development offer in postgraduate medical training, following up their report on the state of leadership development for doctors (Health Education England 2017). The NHS Leadership Academy have produced resources to support trainees and trainers in leadership development.

These developments have run alongside research and policy which has highlighted the role of distributed leadership in healthcare, particularly after the Francis report. Distributed leadership (or non-hierarchical leadership) promotes an understanding of leadership which doesn’t rely on position, but is a role that all

staff can take up and develop relationally rather than requiring positional authority. This shift in understanding of leadership is also reflected in an increasing awareness of the social context of medical practice, which has been driven largely through concerns about patient safety. Non-technical skills and human factors for example have wide prominence in the safety literature and practice, and highlight the role of leadership in a distributed sense in developing environments for high quality care. Accounts of 'new professionalism' also highlight the social context of practice.

The idea of leadership is used in two different, but related senses – as part of medical practice, and in a more traditional sense, as a property or activity of specific positions, often in an organisational context. This is a distinction widely made, for example in the General Medical Council's 2019 report on the state of medical education and practice (GMC 2019), which differentiates between "everyday leadership" and "formal leadership". There is a wide literature on leadership development for doctors, including quality improvement which is sometimes seen separately and sometimes included within a general view of leadership. The most recent review of leadership development programmes for doctors (Geerts et al, 2020) identified the poor quality of many studies, and wasn't able to come to conclusions about which type of leadership development programme were most effective.

The context for organisations

Changes in medical education provide opportunities for Trusts, who have expertise and capacity in many of the areas highlighted in the Generic Professional Capabilities framework, to engage with the medical workforce – trainees and permanent staff – to support medical training. There is a strong and developing evidence-base showing the contribution of junior doctors to quality improvement and patient safety, and the importance of leadership at all levels in improving services. Although there are no studies that have directly linked the quality of medical education provided by Trusts to specific outcomes at the clinical or organisational level, there are reasons to suggest such a link.

Junior doctors can make significant contributions to patient safety and service improvement. In one study more than 90% had ideas for improvement, but only 11% had had an idea implemented (Gilbert *et al.*, 2012). In another study the figure was 28% (Mendis and Paton 2014). The engagement of trainee medical staff in service improvement offers a significant leadership resource for Trusts. Ibrahim *et al.*, 2013 identified factors that supported and limited junior doctors' contributions to improvement. A 'non-threatening' position in healthcare teams, a role deeply embedded in day to day delivery, and experience of different hospitals were all seen as positive attributes. Features of organisational culture as well as limited time were constraints.

Better engagement of medical staff is associated with higher quality care, and the case for engagement of junior doctors particularly is widely made (Aggarwal and Swanwick 2015, Ward 2019). Wathes and Spurgeon (2016:8) found that the evidence,

"paints a picture of a junior doctor workforce that is satisfied with many aspects of training, but that feels undervalued by its employers. This is contributing to increasing dissatisfaction at work, poor morale and high levels of burnout."

They suggest a number of strategies to improve engagement, but also recognise that progress may be 'slow and rocky'.

There is a significant literature exploring the links between patient safety and the welfare of healthcare staff. Hall et al (2016) in a systematic review explored the association between wellbeing of healthcare professionals and patient safety. In the majority of the studies they reviewed, burnout and poor wellbeing were linked with poorer patient safety. Kinman and Teoh (2018) reviewed the evidence about doctors' mental health, and found that "trainee and junior doctors are ... at particular risk of mental health problems. Of particular concern is the evidence that many doctors are experiencing symptoms of burnout and distress so early in their career." While this is a growing area of research, a number of issues relating to junior

doctors well-being and the link to patient safety have been raised such as the consequences of tiredness, and stress.

Recruitment of trainees is also likely to be affected by a Trust’s medical education and management processes. The GMC has a national survey of all trainees each year, with the results publicly available, with details for each specialty in each Trust. In 2019, in the South West the overall satisfaction varied from 67% to 87%. Less than half of doctors completing their foundation years training proceed directly into core specialty training with most taking a one year or a two year break (Cleland et al 2019). A supportive culture and working conditions are highly significant in the training post application choices of F2 doctors, although geographical location in the most important (Scanlan et al 2018).

In 2019, the General Medical Council published a major review addressing “how to transform UK healthcare environments to support doctors and medical students to care for patients” The review, *Caring for doctors, caring for patients* (West and Coia 2019) was structured around the ABC of doctors’ core needs: Autonomy and Control, Belonging, and Competence. The review includes a wide ranging set of recommendation with an associated detailed action plan, but six issues are identified as urgent steps. They are:

A: Autonomy and control	
1 Voice, influence and fairness	To introduce mechanisms for doctors in primary and secondary care to influence the culture of their healthcare organisations, and decisions about how medicine is delivered.
2 Work conditions:	To introduce UK-wide minimum standards for basic facilities in healthcare organisations.
3 Work schedule and rotas:	To introduce UK-wide standards for the development and maintenance of work schedules and rotas based on realistic forecasting that supports safe shift swapping, enables breaks, takes account of fatigue and involves doctors with knowledge of the specialty to consider the demands that will be placed on them.
B: Belonging	
4 Team working	To develop and support effective multidisciplinary team working across the healthcare service.
5 Culture and leadership:	To implement a programme to ensure healthcare environments have nurturing cultures enabling high-quality, continually improving and compassionate patient care and staff wellbeing
C: Competence	
6 Workload	To tackle the fundamental problems of excessive work demands in medicine that exceed the capacity of doctors to deliver high-quality safe care.

For NHS provider organisations, there is good evidence to warrant high engagement with trainee medical staff, including supporting the organisation of training. The new curricula are likely to offer opportunities to Trusts and Trust managers who have expertise in leadership and team working, patient safety and quality improvement to engage more fully with medical education.

Evaluation design and methods.

This evaluation was commissioned by the NHS Leadership Academy. The research objectives are:

- To identify the activities undertaken by 'leadership mentors'
- To explore perceptions about their role by mentors, trainees and their employing organisations
- To identify the activities of mentors that successfully mediate access to work-based leadership learning
- To determine whether any such activities are more effective than any other
- To determine the activities and contextual conditions that have best promoted access to leadership learning
- To develop recommendations for enhancement of the scheme
- To identify issues for further and/or subsequent exploration

In addition to setting the objectives of the evaluation, the Leadership Academy specified that an 'action research' approach was to be used 'to ensure that emerging findings are fed into the ongoing development of the role' with an objective to build local research/evaluative capability in the process.

The evaluation design developed from the initial proposal, following discussion with the Clinical Leadership Mentors, in line with the formative aims. The evaluation included:

- Surveys of Educational Supervisors and Trainee Medical Staff. All Clinical Leadership Mentors were offered the surveys as part of their own processes of embedding their roles, and 8 used the survey. Both surveys were developed by the evaluation team with input from the Deanery and the Leadership Academy as well as the Clinical Leadership Mentors.
- Interviews with Health Education England Staff, clinical leadership mentors, trainee medical staff, educational supervisors, and trust Leaders. A total of 43 interviews were undertaken. Recruitment of interviewees was undertaken through the surveys in 6 Trusts, and through the clinical leadership mentors.
- Analysis of the reports provided by the clinical leadership mentors to Health Education England South West.

Ethical approval was granted by the University of Birmingham.

The tables below show the participants in the evaluation.

Interviews in sites:

	Trainee medical staff	Educational Supervisors	Trust Managers	Total
Site A	4	1		5
Site B	4	2	1	7
Site C	1	1	2	4
Site D	3	1	2	6
Site E	3	2		5
Site F		1	1	2
Total	15	8	6	29

Survey returns

	Trainee medical staff	Educational Supervisors	Total
Site A	26	15	41
Site B	15	41	56
Site C	25	25	50
Site D	14	16	30
Site E	5	6	11
Site F	4	4	8
Site G	9	11	20
Site H	14	52	66
Total	112	170	282

The tables below show the trainees returning surveys, in terms of seniority and speciality.

Training Level	Number	Specialty	Number
Foundation	7	Surgical specialties	12
CT/ST1/ST2	33	Ophthalmology	2
ST3ST4ST5	16	Anaesthetics	12
ST4	10	Medical specialties	26
ST5	10	Emergency Medicine	7
ST6	13	Paediatrics	8
ST7 or above	12	Obstetrics and Gynaecology	4
Non-training grade	11	Psychiatry	20
		Radiology	4
		Pathology specialties	3
		General Practice	9
		Other	5

Results

The results are presented in three sections, which address the research questions, but are also given in the order that the data were collected. First we present a thematic analysis of the interviews with Clinical Leadership Mentors. 11 of the 13 interviews were conducted in April and May 2019, and in keeping the action research design, the results were presented to the Mentors at a meeting on 23rd May 2019. Second, we present the analysis of the data from the interviews and surveys, in three sections – junior doctors, educational supervisors, and trust managers. As well as the interview data, the survey included spaces for comments which provides additional qualitative data. Third, we present the analysis of the Clinical Leadership Mentors reports.

This structure addresses the research questions which are:

- To explore perceptions about their role by mentors, trainees and their employing organisations
- To identify the activities of mentors that successfully mediate access to work-based leadership learning
- To determine whether any such activities are more effective than any other
- To determine the activities and contextual conditions that have best promoted access to leadership learning
- To develop recommendations for enhancement of the scheme
- To identify issues for further and/or subsequent exploration

Perceptions of Clinical Leadership Mentors

Most of the interviews with the Clinical Leadership Mentors were held in the early part of the programme, to explore their early plans to give some feedback to the group within the project.

The clearest theme in the interviews is the variation that exists across the CLM group, in a number of dimensions, for example:

- Variation in trust type, and context, which includes issues such as geography, number of trainees, extent of supportive culture, etc. The number of trainees varied from the twenties to the several hundreds. The geography varied from a single site to a large area, covering many sites.
- Variation in the experience of CLMs. There were current Directors of Medical Education, past and present Medical Directors, Clinical Directors, as well as relatively new Consultants. Most CLMs when discussing their motivation for taking on this role drew from their own experiences during their medical and leadership careers. These experiences and motivations differed, as did perceptions of leadership.
- Variations in early activities, in part due to posts being taken up at different times. For example, some had been asked to concentrate on one or two activities, while others spent most early time in post exploring Stakeholders' perceptions, and building networks.
- Understanding of the key priorities in the role also vary.

These differences make generalisations of the perceptions of Clinical Leadership mentors difficult to make. However the following points were themes in the interviews:

Variations in context

In describing roles and activities many CLMs referred to the job description, and the tasks that are included within it. One for example said: "I'm quite good at doing what I'm told and if I look at the job description and it says....." For some, this focus on tasks led to a lot of activity, such as sending out emails, going to meetings etc, which might be considered 'transactional'. Within a nominal allocation of 2 hours a week, there is a limit to the 'relational' work that can be done, especially for a mentor who needs to develop relationships with one or more Stakeholder groups. CLMs used their allocations in different ways, again depending on context. Some were able to protect time in specific sessions, which was effective in undertaking transactions, but meant other activity had to be accommodated in other time. Others were able to use their time flexibly, for example using existing networks or roles. It was acknowledged that 2 hours was exceeded (the CLM group days accounted for nearly all that), but that was a standard challenge for roles outside fixed clinical commitments.

The few or the many

The 'few or the many', is a phrase that was used in a number of interviews. This usually referred to the trainees who the CLM can work with, although it also referred to others, such as Educational Supervisors. There were some differences in approach, which were heavily influenced by context, and this is a theme running through the evaluation.

Engaging with others

One way that a number of CLMs addressed this tension between 'the few or the many' was to work with others, usually informally, to support the role. These others were self-selected, sometimes opportunistic groups, including for example trainees who showed an interest in leadership or quality improvement, specialty trainees who the CLM knew, Chief Registrars or other leadership fellows, some of which are not training posts, Consultant colleagues with an interest. This was an area where different practice and contexts give opportunities for learning across the CLM group. One resource

that was mentioned in some interviews as particularly helpful, was the post graduate medical centre staff at the Trust.

Understandings of leadership

CLMs had a clear belief in the importance of leadership to trainees, and that was often expressed with a 'spiral' understanding. Although there were some differences in emphasis, there was a theme that in the early years of postgraduate training the need was more on relational leadership skills (such as initiating a difficult conversation), while later on, and particularly towards the time of transition to a Consultant role, there was more emphasis on issues such as organisational leadership, and leading quality improvements. QI in particular offered some Trusts a vehicle for leadership development for trainees because of the way that QI was embedded in the Trust. There were also some differences in emphasis, particularly at the later stage of training, with some emphasising the organisational and service context (including the idea of 'followership') and others continuing to emphasise relational skills, such as working in and leading, (formally and informally), clinical teams. One CLM highlighted that early relational leadership mistakes in a Consultant career may be difficult to recover from.

Models of leadership

A related issue on the understanding of leadership concerned the 'model' of leadership that is adopted. There are several alternatives, for example the Medical Leadership Competency Framework, the Leadership Academy Healthcare Leadership Model, the Faculty of Medical Leadership and Management standards, and the GMC Generic Professional Capabilities framework. There may also be differences between different specialties' curricula requirements. This landscape is complex, and for some CLMs that didn't support clarity of message.

Leadership within medical education.

Similarly, there was variation in views about whether Educational Supervisors were taking a developmental view on their input into leadership development and assessment, or a more limited view. There was though, acknowledgement of the increasing demand on Educational Supervisors, and the support available to them to develop leadership skills and interest.

The role of assessment was also considered in interviews with CLMs. There were many references to 'box-ticking' with some resignation that it was likely to be inevitable for many trainees and trainers. There was a concern that efforts to promote some specific activities may support this culture, with constraints on the capacity of many trainees to engage with some opportunities. An example was that for a trainee to usefully contribute to an RCA, they would need to be available at the right times. The culture shift required to address this might take some time, and might be led by trainees themselves who understand the need for genuine development rather than 'box-ticking'. This provides a perspective on the 'many or the few' issue. One CLM said for example, "What you can do, all you can really do is inspire them to be interested in these things".

Perceptions of trainee medical staff, educational supervisors, and trust managers.

Perceptions about the Clinical Leadership Mentor role related to both the role as experienced, where that was appropriate, and the need for the role where participants had no experience of working with a Clinical Leadership Mentor. As discussed above, variations between Trusts, and the mentors themselves made it difficult to think of the 'role' across the Trusts.

In the survey we asked both trainees and educational supervisors about the CLM role, in terms of who the CLM is, what the role is, and whether they felt supported by the role. It should be noted that the circulation of the surveys was managed by the CLMs themselves, and so some respondents

may have been influenced in their answer by the communication of the request to complete the survey. That might increase the number who know who the CLM is, but perhaps not in understanding the role. These figures suggest that CLMs have had considerable success in developing the role, but have some way to go.

	Trainee doctors (n=112)	Educational Supervisors (n=170)
I know who the Clinical Leadership Mentor at the Trust is	49%	55%
I understand the clinical leadership mentor role	31%	39%
I feel supported by the clinical leadership mentor in my leadership development	33%	40%

Data to explore the perceptions of trainee medical staff, educational supervisors, and trust managers comes from the qualitative data within the survey, and the interviews. A number of issues were identified at meetings of the CLMs that would be relevant in considering the role. Chief among these was how trainees, and supervisors, understood 'leadership'. Their view of leadership will influence their view of leadership development, and so as well as exploring the role of the CLM, we explored perceptions of leadership, leadership development experiences, leadership development needs and preferences for development activities.

Trainee medical staff

Our survey explored a number of issues regarding trainees' attitudes to leadership and leadership development. Recent evidence has suggested that trainees identify with an individual, hierarchical understanding of leadership (Gordon et al 2015, Gordon et al 2017). Moen et al (2018) in a survey of trainees before a leadership development course asked whether trainees considered themselves a leader, and only 59.4% said that they did. This increased to 92.7% after the course. Although this seems an impressive increase, it does seem to suggest a view of leadership development as an event rather than a process. We asked the same question as Moen et al, but through a 6 part likert scale rather than a simple yes/no response. The table below shows the percentage of trainees in the survey agreeing with the following statements:

	% Agree
I consider myself a leader	78%
Leadership is important as a part of my clinical practice	94%
I am interested in management and leadership	83%
Leadership requires a senior position	38%

These results show a clear engagement with leadership in both clinical practice and related to management. The view of leadership as an activity of senior colleagues is held by fewer than 40% of respondents. Although the data set is limited, it is possible to consider the questions by stage of training. There is a difference between early and late trainees in terms of whether they consider themselves a leader, but not in the belief that leadership requires a senior position.

	I consider myself a leader			Leadership requires a senior position		
	Agree	Disagree	% agree	Agree	Disagree	% agree
Foundation, Core Trainee, ST3	40	17	70%	21	36	37%
ST4 – ST7 and above	39	6	87%	18	28	39%

We then asked a number of questions about leadership development. Just over half of trainees had discussed leadership with their educational supervisor in the preceding six months. Over two thirds felt supported by their training programme for leadership development, and felt they had access to leadership development opportunities. A slightly smaller number felt supported by their Trusts. There was some variation between Trusts with a minimum of 36% and a maximum of 64% in Trusts where there were more than 10 responses. 86% of respondents agreed that the environment for leadership development varied between Trusts, and so exploring how this environment is experienced and how it can be developed is an area that may warrant further investigation.

I have discussed leadership with my educational supervisor in the past six months	51%
I have access to leadership development opportunities in my current role.	65%
I feel supported by my training programme in my leadership development.	67%
I feel supported by the Trust in my leadership development	54%
The environment for leadership development varies between the Trusts	86%
I have further leadership development need in the next 12 months	92%

The 92% of trainee medical staff who agreed that they had further leadership development need in the next 12 months seems to provide some validation for the high profile that leadership development is currently enjoying, reflected in the establishment of the CLM posts.

We asked in the survey what leadership activities trainees had undertaken, and which would be of interest in the future. The results are given in the table below. By far the most significant development activity that has been undertaken are quality improvement activities, which 80% have undertaken. This high level of current experience may explain the reduced (although still over 50%) future interest. Opportunities to shadow management or clinical management colleagues, have rarely been available but have high interest. The emphasis on developing shadowing opportunities in the Clinical Leadership Mentor's role seem justified. 8% of respondents have had access to a leadership qualification, with over half saying that would be of future interest, although there is no exploration of whether this is because they would value the learning, or the qualification.

Leadership Development activity (in the same order as the survey)	Have completed	Of future interest
Quality improvement activity	80%	52%
Root cause analysis investigation	12%	40%
Mentoring or coaching	36%	62%
A leadership course	38%	63%
Non technical skills or human factors course	38%	45%
A leadership qualification	8%	54%
Shadowing management colleagues	8%	44%
Shadowing clinical leadership colleague, e.g. medical or nurse director	8%	48%
Management role in Trust, e.g. rota co-ordinator	22%	28%
On-line leadership programme or course	14%	33%
Sign posted online resources	7%	20%
Other	11%	4%

Qualitative data is available through the survey and through the interviews. A considerable volume of data (over 7,000 words) was collected through the surveys, and 15 interviews were conducted.

The key themes from the qualitative data are given below, with the opportunities for the CLM role presented at the end of the section.

Contextual variables

Many interviewees acknowledged the need to engage with leadership development. Several contextual variables were identified in the interviews, which sought to explore different degrees of interest in leadership and management, and engagement with leadership development. Several, including the stage of training, the Trust context (including size and geographical spread), and the interest of trainees and trainers, are discussed elsewhere. Two that are highlighted here are specialty, and the experience of trainees.

Two specialties with strong representation in the data are Psychiatry and Emergency Medicine. Psychiatry trainees were prominent in the sample because of the recruitment approach through Trusts. Key supportive issues for psychiatry trainees for leadership development were the 'flatter hierarchy' in psychiatry with, in some specialties at least, a constant emphasis on multi-disciplinary teams and multi-agency working, often over long periods of time. Psychiatry trainees also have more regular supervision, and time allocated for non-clinical development, recognising the importance of generic professional capabilities in practice.

Emergency Medicine was also identified as a specialty where leadership training has a high profile from the College. The 'EMLeaders' programme was developed in partnership between RCEM, Health Education England and NHS Improvement, and is for all trainees. Its development and implementation is through a strategy to address staff retention and burnout within emergency departments. The prominence of leadership, and the training within in the specialty was noted by the trainees that were interviewed, but it was also noted that this prominence and the specific programme may reduce the availability of other leadership development opportunities.

The experience of trainees was explored by several interviewees who were a little older than their contemporaries. Two trainees had other careers before coming into medicine, and drew on those experiences in exploring their attitudes to leadership, and their knowledge and skills. Another trainee was older because of periods of part time training.

"I'm older ...than other trainees at my stage. So I think maybe I've started thinking more about that management leadership stuff than I would have done if I'd just done a full time training and gone straight through because then – you also get, it's quite nice being part time, it's a bit of luxury."

Although the hours of training had been the same, the time as doctor had been longer, and therefore time to reflect on being a doctor had been longer.

Understanding of Leadership

The understanding of leadership with the distinction between leadership in practice and leadership in an organisational setting, which is discussed above, is widely represented in the interviews, with examples of leadership drawn particularly from clinical experiences. The quote below highlights the developing interest in leadership as clinical seniority develops over training. The gradual nature of this realisation is significant here, as is the importance of others in validating a leadership role.

"I think probably when I was a foundation doctor I definitely didn't feel like a leader, I ... I felt like a follower, but then I think it's come on slowly over the training as you take on projects,

as you take on a more senior role within your clinical team you realise where you are leading day to day. And that it's not necessarily a title that you're given, it's just the way that the teams start looking at you, realise how they respond to your moods and what you're saying! Yeah, I think it's just gradually built over the seven years really as opposed to a definitive moment where I was like 'yes, I'm a leader now'.

In some interviews specific clinical contexts were considered as significant for recognition of the clinical leadership role, such as being on nights where the clinical responsibility may be higher. Several trainees identified the movement from junior trainee to senior trainee as a significant transition, with the term 'Registrar' prominent in accounts:

"certainly in my ST1, ST2, years, it was never talked about or mentioned at all and then as you become a registrar people start talking about 'oh, you're going to be a registrar soon and you have to think about what kind of leader you want to be."

This trainee is reflecting others' perceptions of the registrar role, but also identifying the key transition to clinical decision maker. Another trainee identified the importance of appearing knowledgeable and confident in leading teams, reflecting the importance of others' perceptions.

The importance of being clear about the different usages of leadership was identified as a key learning point during training. One trainee thought that "making it a bit clearer what people mean by leadership early on, earlier on in training" was very important – she had felt earlier on in training that leadership was a 'business-y' idea, rather than one directly relevant to clinical practice.

The need to understand the structure of the NHS, and the way the system worked was widely acknowledged. For some this knowledge represented a shift between leadership as part of practice and organisational leadership, but for others, as discussed above, engaging with the organisation is an element of clinical practice.

Constraints and opportunities

A number of specific constraints and opportunities were identified in interviews with trainees. The most clearly reported constraint was the lack of time to engage in leadership development, and the tension between the development of generic skills and what was widely referred to as 'clinical training'. The following quote expresses this tension. However, the emphasis here is on time outside the clinical setting.

There is a lot of 'leadership' talk. It is very difficult to translate this arguably over-emphasised aspect of our training into tangible QI. I find it slightly frustrating and moderately stressful to have the constant barrage of leadership requirements yet not a lot of real time or opportunity for it to manifest outside the clinical setting.

Another time related constraint is short rotations, with an acknowledgment that developing effective relationships with colleagues is difficult in a six months rotation, which may also include shifts and different working locations.

A lack of availability of resources for leadership development wasn't a strong theme, although there were comments that activities that were free may be more attractive. Several interviewees had developed activities through being proactive, rather than waiting to hear about opportunities or being encouraged in certain directions. One example is given below of a trainee who identified an opportunity through chance and the willingness to create an opportunity.

...the other opportunities are ones that I've created,..... I saw a job description for a lead nurse and I just contacted them and said 'oh I didn't know this was, you know, a group that existed, I'd like to be part of it.

However, this trainee also explained that, *"as soon as people know that you're interested, stuff just keeps coming up and up and up and it's ... something that I'm really struggling with to say no."* This might suggest a preference in management for engaging with trainees who are already known, and perhaps are understood to be useful management colleagues.

Another trainee explained that because she had an interest in leadership, she was alert to opportunities, which 'jump off the page'. This may be another example, where opportunities became available to those with an interest, and a personal capacity to engage.

The value of experiential learning, but the variable environment for it.

The usefulness of learning leadership through practice, rather than only in a course was a key theme, and this reflects the literature available. However, trainees' experiences of the support available for learning at work was variable, and this was often considered in relation to experiences of QI projects, which have become required for training programmes. For example, one trainee said that:

I think I share the feeling with many of my colleagues that the "enforced" quality improvement projects were very much a box-ticking exercise to get through ARCP - there was not definite guidance and support from senior colleagues (although I recognise this is likely a result of junior doctor engagement as well). I cannot think of any projects from peers that resulted in an actual longstanding process change.

A number of trainees used the word 'tick box' as in the quote above, acknowledging the purpose of specific activities like QI projects, but questioning whether they got the most from them, and whether their efforts led to genuine improvement. This trainee was discussing support available from senior medical colleagues, but others also explored the support available from elsewhere, again in the context of QI projects:

[Doing a] Q.I. project was good but felt that I had to drive this by myself and was not supported by the trust much to do this. This felt pretty different to my experience [elsewhere] where I was supported in QI by regular meetings with a QI fellow (e.g. junior doctor on a year QI placement) or full time QI employee. [Elsewhere] consultants were also keen on QI and encouraged trainees to take part where as in [Trust] it seems to be something that you only do if you are particularly interested.

Another example was the involvement in leading rotas. While one trainee said that *"I managed a rota in a previous trust. It certainly was an eye-opening experience about how something that seems simple (just a spreadsheet...?) can end up being hugely complicated"*, another described an experience in managing the rota where administrative staff were not prepared to help with a review of the rotas, *'which was cumbersome, and not of any educational value.'* In addition in this case, when there were problems with compliance of the rota, there was no support for taking this forward.

For some, the Trust context was experienced as unhelpful rather than simply neutral. In the quote below, the trainee, while understanding the need to undertake QI in a systematic way, experienced hurdles in engaging with Quality Improvement

.. the trust ... insists that audits etc be undertaken through the official audit department and has lots of rules such as audits being done across multiple sites etc etc which inevitably puts a

huge bureaucratic and organizational hurdle in the way of getting juniors involved in smaller leadership type projects.

These examples highlight the educational value of roles, whether in QI or more generally, to be genuine leadership roles, with support not only to enhance the learning experience, but also to enhance the effect on services. These experiences provide some depth to quantitative data that highlight the variation between trusts for the environment for leadership development.

One trainee went further than noting support specifically for leadership development, by considering the motivation for learning about leadership in a Trust which didn't seem to be generally engaged with trainees. This seems to be a wider point which connects the issue of trainees' learning about leadership with issues of welfare and engagement.

I think the Trusts where I didn't feel supported, you just felt like quite invisible in the Trust, ... for example [when] I joined ... there was no welcome, there was no 'these are the opportunities we've got', it was very much you were a little fish in a big pond and you've got to find about everything for yourself and I think when you feel like that you kind of don't then want to almost give back because you're just like 'well, you know, I'm not going to spend my whole day trying to find out what meeting this is and how to do this and that.

Learning experiences.

The availability of leadership mentoring, particularly through the educational supervisor, was variable. In some cases, discussion of leadership was initiated by the trainee, and for some there was a concentration on management rather than leadership. The time available for supervision was also a constraint.

'My supervisor in my second year was actually quite high up in management and he was quite useful but your time with your educational supervisor is really quite brief, I think, in terms of actually looking at any personal development and they ... know you a certain amount you get regular contact but you know there's not really enough time to really delve into stuff, I don't think.

Although there was encouragement to access leadership course, leadership wasn't always included within medical training programmes managed locally. Some welcomed the opportunity to engage with others in leadership development events, which they saw as breaking down specialty silos. 'Others' might be other medical trainees, but also other colleagues although the availability of interprofessional learning opportunities seemed to be low.

Opportunities for the CLM role.

Not all the trainees had heard of the CLM role. For those who had, an aspect of the service that was valued was the availability of information, including about leadership development courses, but not restricted to that. One trainee thought that the availability of courses had increased, and that the range of options was confusing. The availability of guidance about the specific courses would be welcomed, and it was acknowledged that where the CLM was known, the availability of a source of advice was very useful.

Three other opportunities for the CLM role were identified in the interviews, which relate to the themes identified above.

- First, it was felt that opportunities to network with trainees from other specialties were helpful, but often rare, and that this was an area where the CLM could play an important role.
- Second, to provide an opportunity to discuss leadership issues, perhaps where there were limited opportunities to do so with educational supervisors, or other colleagues.
- Finally, one trainee noted difficulties when poor leadership was experienced or seen, and in these specific cases it might be useful to have access to someone to discuss it with, outside the normal educational channels.

Education Supervisors

The importance of the role of educational supervisors was discussed during several of the CLM group meetings. In our survey, we sought the views of educational supervisors about leadership, their current practice in discussing leadership with trainees, their preparation for curriculum changes, and whether specific activities that may be undertaken by Clinical Leadership Mentors would be useful.

Educational supervisors overwhelmingly agreed that leadership is an important element of medical training, and that leadership development should be available in all years of training. Around a quarter felt that leadership development should be part of medical training only for senior trainees. As the bottom two answers add up to more than 100% there is some inconsistency in the answers, but the pattern is clear.

Leadership is an important element of medical training	98%
Leadership development should be part of medical training in all years of training	89%
Leadership development should only be part of medical training for senior trainees	26%

We then asked about current practice, and readiness for curriculum changes. Over 82% of educational supervisors reported that they currently discuss leadership with trainees. This is higher than the 51% of trainees who say that they had discussed leadership with their educational supervisor, but that may be explained by unrepresentative samples for both, or by differing understanding in what is understood by 'leadership'. Nearly three quarters of Educational Supervisors believe that they have the skills and the knowledge to discuss leadership development with trainees. However, only 34% said that they were fully prepared for the curriculum changes to implement Generic Professional Capabilities. Just over half said that that they understood the opportunities that are available trainee doctors for leadership development.

I discuss leadership with trainees	82%
I have the knowledge required to discuss leadership and leadership development	70%
I have the supervisory skills required to discuss leadership and leadership development	74%
I understand the opportunities which are available for trainees in leadership development.	53%
I am fully prepared for the curriculum changes to implement Generic Professional capabilities	34%

The Educational Supervisor survey asked the same questions about which leadership development activities are likely to be most valued. The results are given in the table below with a comparison with the same data collected from trainee medical staff. The trainee medical staff figures are based

on future interest in the context for each of the respondents of what they have already undertaken, which is discussed above. Educational Supervisors place a lower emphasis on leadership qualifications, and a higher emphasis on shadowing opportunities.

	Educational Supervisors (n=170)	Trainee Medical Staff (n=112)
Quality improvement activity	91%	52%
Root cause analysis investigation	63%	40%
Mentoring or coaching	60%	62%
A leadership course	63%	63%
Non technical skills or human factors course	65%	45%
A leadership qualification	24%	54%
Shadowing management colleagues	71%	44%
Shadowing clinical leadership colleague, e.g. medical director, nurse directors	76%	48%
Management role in Trust, e.g. rota co-ordinator	68%	28%
On-line leadership programme or course.	35%	33%
Sign posted online resources	30%	20%
Other	4%	4%

The key themes from the qualitative data are given below:

Variations in the educational supervisor role

From the interviews with educational supervisors, it is clear that there is a high degree of variation among Educational Supervisors. The formal expectations of the role differ depending on specialty, and the stage of trainees being supervised. The role may also differ from region to region. Some interviewees had experience of being an Educational Supervisor in more than one region and were able to draw comparisons between their experiences. Some Educational Supervisors may retain the same trainee through all their speciality training, so the ability to form a relationship that can encompass discussions of a non-clinical developmental nature may be more easily accommodated.

Foundation Year trainees will have a quite different experience of their supervision, than a more senior trainee who is nearing completion of their speciality training:

“...having a trainee in their last year while they’re applying for a consultant job, their needs are very different to a trainee in their first year ... I think as people come to the end of their training they realise that soon they’ll be the consultant and having an opportunity to develop other leadership skills is really quite important.”

In addition, shorter placements will limit the opportunities for a trainee to take on a meaningful piece of work within an organisation and see it through to completion.

“...the fact that trainees potentially move jobs quite a bit and so having someone in post for long enough so that they can actually see a non-clinical project through to the end I think is probably a greater challenge... Well if they’re a higher trainee then they’d be for a year though that does give an opportunity to sort of get their teeth into something, but if they’re an SHO they might be only four months or six months which, yeah, probably limits their ability to get involved.”

Constraints and opportunities

The restrictions of time on the Educational Supervisor role were commented on by both trainees and Educational Supervisors and this may be particularly challenging for those who have additional management or leadership roles. The impact of this limitation was described as a prioritisation of a more instrumental approach, with the 'coaching' role and attention to non-clinical development needs being constrained.

"...it's all well and good, all of this stuff – and I'm not saying that it's not the right thing to do, because it is the right thing to do and we should be trying to get our trainees to be well rounded individuals – the problem is, it's the time to do it."

The extra-curricular experiences offered to trainees as part of their rotational placement by their Educational Supervisors seem wide ranging from the responses received from both interviewees and surveys but are another element of considerable variation. In one organisation for example, an Educational Supervisor was able to take trainees on visits to another unit as part of a peer review quality process.

"...a couple of my trainees, actually 2 or 3, have come with me on an external visit to another unit as part of a ... quality network, where you do peer reviews of different .. services... Because that's sort of the opportunity you don't get really until you are a consultant usually. And they found that really valuable."

Psychiatry as a specialty offers a specific opportunity to trainees to devote time to non-clinical activities.

"...in psychiatry ... our trainees are supernumerary so we're able to give them their opportunities to develop in that area. Certainly my senior trainees who did less clinical work and more things like root cause analysis ... which is a really hard thing to do, but it gave her the skills that she now knows she can draw on as a consultant."

However, the nature of specific psychiatry services may also have implications for the ability of trainees to get a broader experience of management and leadership activities, as noted by two Educational Supervisors. For example:

"You know, we're quite insular. ... so we have a couple of senior [specialty] trainees, and we do try and encourage them to come into the sort of management side. I think it's harder in different parts of the Trust, to be honest."

Interviewees commented on the importance of taking advantage of opportunities as an important aspect of the activities that juniors could become involved with, and that the responsibility for making the most out of opportunities lay with both the trainee and the Educational Supervisor.

'It's quite dependent on what the trainee brings, and what opportunities come up at the time they're with you.' –

One Educational Supervisor had observed a change in attitude among trainees towards wanting to know more about how organisations work and had given some thought towards facilitating this.

"And I think that's really where I would go in terms of, you know, what it is that they need to develop, because I think trainees are so much more curious than I was at their stage, they are much more curious about organisations than I ever was ..."

Organisational Context

Educational Supervisors from organisations with Chief Registrars and Clinical Fellows spoke very positively about the benefit these roles bring to the organisation and how they can act as additional sources of support to facilitate the development of leadership skills for trainees.

“This has been a really very, very good role and most of them have excelled and they’ve found this a very good opportunity they’ve come up with some really good projects that really helped in a lot of things in the Trust.”

Strong organisational support for Quality Improvement and a robust infrastructure was also highlighted as an important contextual factor in providing good leadership opportunities to trainees.

“We’ve got a great QI Department in the Trust itself and a great audit department which kind of builds on, you know, virtually everything that we do in quality improvement anyway. And really our ... organisation is quite keen on people just getting involved in a level where they wouldn’t normally have the opportunity to do that.”

Senior level support from an organisation’s Medical Director and Chief Executive were also referenced as significant enablers to providing meaningful opportunities to trainees. The length of tenure of these posts was seen by a number of respondents as being critical in terms of establishing and maintain a positive culture of medical leadership development across all the grades. It was also suggested that evidence of organisational support for senior medical leaders is required to set the tone for trainees.

The size of an organisation was also given as an important factor in the development of a culture that is supportive of medical leadership and where opportunities are potentially more apparent.

“...it’s a small organisation ... compared to others ... There’s a lot of goodwill and staff have good relationships, it’s a good collegiate atmosphere and so actually if my trainee was interested in developing something, it would be very easy for me to sort of introduce them or signpost them to someone within the organisation who could.”

Mental Health Trusts were again singled out as being contextually different in terms of developing a more collaborative culture and flatter hierarchy, through the nature of the clinical work. This was expressed by one Educational Supervisor as an enabling factor in developing opportunities for trainees to take on more responsibility.

“... we probably do work very integrated with the multidisciplinary team, so where I work in a community mental health team, I mean, I spend more time with nurses and OTs and psychologists than I do other doctors ... the hierarchy’s a lot more flat in the teamwork..”

The concept of leadership and trainees’ leadership needs

The definitional ambiguity of the concept of leadership was remarked up on by Educational Supervisors and their own understanding of what it might constitute appeared to reinforce a distinction between professional leadership and positional leadership, with the former representing the behaviour expected of someone leading a clinical team to deliver care effectively, and the latter relating to recognised non-clinical roles or job titles.

“because I think to me when you start saying leader, I automatically think of our speciality lead, our medical director, our clinical director and just...and that isn’t necessarily what leadership is about, ... my actions are viewed by an awful lot of people in our [] team who potentially might look up to me ... and therefore I am aware that my actions need to be fairly pristine and good for the patient ... so that other people follow and do the same thing.”

Educational Supervisors also commented that the nature of being a doctor means assuming responsibility for decision making and that this factor meant that all doctors needed to display leadership qualities but that these qualities could develop organically.

“I think naturally just by doing the job, I don't know, as a doctor you are in a leadership position, people just look up to you anyway as a doctor, as sort of the final decision maker. ...you earn your stripes and you grow and develop ...you get involved in situations where you feel a little bit out of your depth and then once you come through it you've sort of learned and grown.”

Though leadership as a concept was differentiated into different kinds of leadership functions and contexts, Educational Supervisors spoke about the commonality or overlap of skills required, particularly communication and social skills.

“The ability to inspire confidence is the same, the ability to appear calm and to be able to speak coherently is still the same. You still need to be able to get your point across to the team that you are leading, whether it is in a resuscitation effort or a Trust merger.”

Views on the 'right time' to introduce leadership discussions into training varied slightly, but starting early was a common theme.

“But I think actually it starts right from the beginning as a core trainee just doing little things, just organising rotas, just organising meetings, chairing meetings, all those kind of things which are daunting, but it's much easier to do it as a trainee and make mistakes and seek guidance ... And I think if they can get those done early they can build upon them and hopefully, you know, they're really well contained when they start their consultant roles.”

Involvement in quality improvement activities has become an important element of developing a broad set of skills and these activities are generally viewed positively by Educational Supervisors as a means by which trainees can prepare for consultant posts:

“... I agree with the fact that they're made to do a quality improvement activity every year... There's a number of reasons for that. I mean partly because we need to be constantly monitoring our practice and check we're doing things right, but secondly at the end of the day they're going to be made to do that as consultants, ...”

The confidence of Educational Supervisors in having leadership conversations

It appears that the professional leadership aspects of leadership are covered quite naturally in discussions between Educational Supervisors and trainees and within their close working relationship.

“... managing colleagues, managing teams, managing peer relationships, managing those who have authority over you and how to manage those kind of relationships, that's where they really struggle and that's where a lot of people get unstuck. ... I can incorporate it into any discussions meaningfully into not just the clinical aspect ... but extend that into what else it might look like.”

The aspects of leadership that Educational Supervisors appear to feel less confident in discussing with trainees are aligned to leadership as a positional role, with specific organisational and management functions being less well understood.

“I struggle to keep on top of my day job let alone understand the intricacies of how a contract is made and how a service goes out to tender, so it almost feels like completely different sort of spheres that sometimes overlap, or try and overlap, but it's quite difficult to understand what on earth's going on and what it all means.”

Perception of CLM role

The level of awareness of the CLM role among Educational Supervisors varied and knowledge of their specific remit was often patchy, but the establishment of the role was widely supported.

The role was also seen as someone who could supplement the 1:1 support provided to trainees by their Educational Supervisor. The CLM was also seen as a source of advice and development for Educational Supervisors themselves and for newly appointed consultants, struggling with their new leadership duties.

“... I guess as a person to go to, to talk about how to develop their leadership skills that would be a useful thing to do. I mean you’d hope that your trainers would be able to do that with you but your trainers of course come from all backgrounds; some of them are good leaders and some of them are not, therefore having somebody outside of your trainer that you can go to would seem quite useful. It would also seem quite useful for actually some of the consultants to go to them for advice on leadership and advice on how to help their trainees as well, because we don’t always know what’s available and what might help all our trainees.”

The expectation of the role to have a more strategic or organisational focus was not a common theme but one interviewee did suggest that the role of the CLM could be to intervene with peers or ‘barriers’ in the system that were perceived as preventing beneficial change.

“... some people are very, very resistant to doing things differently and unfortunately, for whatever reason, are in positions of responsibility which makes it very difficult to move things along ... So I think one aspect that would really help is supporting a system whereby patient orientated change could happen in the system whereby one person couldn't just block it.... I think I need the assistance of some people at that same level really with a person who's causing the kind of barrier – a barrier is probably the word I would use.”

Trust Managers

Our sample of Trust Managers was determined by the Clinical Leadership Mentors, and was made up of one General Manager, two Medical Directors, two Directors of Medical Education and one Director of Nursing. This is a limited sample, and perhaps not representing the levels of management where engagement of trainees, in practice, happens. Across the interviews there was a clear commitment to the principles of medical leadership in general, and engagement with trainees specifically. Knowledge of the Clinical Leadership Mentor role varied. Senior doctors often referred to their own experiences of learning leadership, and examples of where problems had been experienced because of a lack of leadership within clinical teams.

Organisational context

The organisational context for engagement with trainees and supporting their leadership development was a key theme. For example one Director noted that changes were being made to root cause analysis processes in order that they were more connected to service areas, rather than being managed centrally. The commitment to engagement was in some cases accompanied by an acknowledgement that the involvement of trainees has been ‘a weakness in our system.’ Another Director discussed an NHSI programme aimed at engaging all staff in quality improvement, and in one Trust there is an initiative specifically directed at engaging doctors in leadership. Significant Organizational Development initiatives were reported in most Trusts where we have data. These initiatives offer opportunities to engage with medical trainees, which was often explicitly acknowledged.

Trust commitment to engagement with trainees

The commitment to clinical leadership, and specifically medical leadership was also high. One Medical Director acknowledged that the historical context for medical education was that it was done through the Deanery, and that Trusts were only peripherally engaged. As well as policy drivers to improve engagement of trainees, and their leadership development Trusts had their own interests in developing their relationship with trainee doctors. One was that as key members of the workforce engagement with quality improvement processes was likely to be effective, especially considering the range of experiences they often bring to their role. A second reason for engaging was that Consultants are often appointed from the ranks of previous trainees, and therefore providing a good environment for trainees is likely to support recruitment activities.

However, there were constraints to leadership development, in the sense of providing formal development. For example:

“It’s a really busy There is a huge service requirement for the organisation to see the patients and try and keep people as safe as possible. So the challenge really is to maintain leadership training in the context of a service which is under extreme pressure, and often education opportunities are the first thing to get cut when there’s service pressure.”

“I mean I think in the current economic climate, I think it’s unrealistic to say that a Trust is going to sort of set up some huge leadership programme, specifically for trainees. It would be nice, but – but having said that, I think we do in the sense that so for example the exec team, the Chief Executive, we’re all open to having people coming, spending some time with us, shadowing us et cetera, so we don’t close things off to people”

Link with medical leadership

Senior leaders linked initiatives to improve clinical and medical leadership generally, with the more specific issue of supporting the leadership development of trainees. Much of the talk about leadership development for trainees became the more general issue, and there was a clear link understood between the environment for medical leadership and the environment to support leadership development for trainees. One trust manager identified that these two issues may conflict, in that new opportunities for involvement may be more directed at Consultants than trainees.

“... I’d like to have had the junior doctors more involved in a lot of the wide service improvement that we’ve done so we’ve done a lot of service redesign [but] we have had no junior doctor involvement in that. That’s not because it’s the junior doctors’ fault. It’s just it seems to always be a default that consultants are the ones that are the sort of medical representatives for it”

It was also acknowledged that clinical leaders in Trusts sometimes had too much administration that got in the way of leadership:

“I think some of the more line management things, they need to come out of it, so checking annual leave or rotas, if that could be taken on by somebody else, or recruitment issues, that would be helpful. And then free up time to get involved in the clinical things, being part of service changes, service delivery, so having been the clinical lead”

Perhaps the key link between medical leadership generally, and leadership development of trainees is the role modelling from senior medical staff who are engaged in leadership. The emphasis was on role modelling from Consultants in general, rather than specifically within the education process.

The quantitative data from trainees, discussed above, suggests variation in Trust support, and there may be a gap in some Trusts between stated commitment and the opportunities actually available.

Perceptions of the Clinical Leadership mentor role

Senior Leaders tended to see the CLM role as encouraging and facilitating rather than providing specific services. There was in the Trusts from which our interviewees came, a clear engagement between the Clinical Leadership Mentor and senior management, in some cases because the CLM role was combined with another role. While this guarantees access, it doesn't provide the extra leadership development capacity or new perspectives that an appointment from outside the existing structure does. This is a matter for individual Trusts, and there was no sense in the interviews with senior managers that their current arrangements were anything other than appropriate.

Activities of Mentors

At the end of 2019, the Clinical Leadership Mentors were asked to submit a report to HEE of their activities. The reports were structured around the key responsibilities of the role as described in the job description, which are shown below with a broad summary given in each area. 17 reports were received.

Key responsibility	Summary
To identify suitable leadership roles and projects within and around the organisation and to lead on overseeing and supporting medical trainees as they engage in these activities.	This has been widely developed by CLMs, with some variation. For example, some have highlighted major opportunities such as Chief Registrar posts, or Leadership Fellowships, while others have concentrated on local roles such as in Junior Doctors committees, and developing representative roles with the Trust, with some certification. Matching of trainees with Trust projects is also a key activity in this area.
Develop and support a buddying scheme allowing trainees to shadow various leaders and managers within the Trust /LEP at meetings and in management activities.	This was reported in 10 Trusts, with successful buddying with Executive Directors and Graduate Management Trainees. In some Trusts limited interest was noted. There was a distinction in some reports between buddying and shadowing, with buddying being a longer term relationship, and shadowing being shorter term, for perhaps a specific day or meeting. One CLM plans to develop this into a two way buddying scheme, so trainees could provide managers with opportunities to experience the clinical environment. Some CLMs described a process through which opportunities are made available.

Develop and support participation by trainees in patient safety issues / RCA (root cause analysis). Develop and support multi-professional Quality Improvement (QI) work – aligned to Trust organisational objectives with involvement of the Trust QI Lead. Help support involvement of trainees on various QI projects within Trust.

This is the area that has had clearest progress in the reports, with all CLMs making progress, particularly with Quality Improvement initiatives, which are routinely part of training programmes. Some reports described initiatives for the Trust's QI team to proactively engage with trainee medical staff. Other specific initiatives were mentioned less often, such as engagement with Root Cause Analysis investigations, although one CLM arranged RCA training for all trainees, and another has engaged with the Governance Team to offer opportunities for involvement in RCA investigations. A number of Trusts have developed awards and prizes for trainees getting involved in QI and leadership opportunities.

Highlight and embed leadership opportunities at Trust/LEP Induction

Induction is in some Trusts a pressurised event, and so direct involvement has not always been possible. Some large Trusts also have a large number of events, and so where attendance is possible some prioritisation is necessary. Some CLMs already attend induction in other roles, such as the DME, and some have supported other leadership posts, such as Chief Registrars to engage in induction.

Work with relevant Specialty Tutors, Clinical Service Leads and Clinical Directors to help facilitate robust and comprehensive leadership opportunities within the various specialties/departments within the organisation.

In this area there has been a variety of approaches, with engagement of different groups of colleagues, including meetings with medical education faculty, clinical and service directors, medical advisory group, college tutors, and management colleagues. Some CLMs who have been in Trusts a long time or hold other appointments highlighted the role of personal networks. The importance of working with administrative staff in the post graduate medical education centre was emphasised by one CLM, and of visiting outlying sites in a geographically dispersed Trust.

Support trainees' representation at multi-professional Senior Team meetings – as both observer / participants.

The link of this action with the buddying scheme was made, as was the opportunities offered to specific posts such as Chief Registrars.

Develop and support workplace invitations to leadership learning opportunities.

This was a key area of activity with most CLMs highlighting their role in disseminating leadership development opportunities. Several CLMs have designed and delivered leadership training, including facilitating peer to peer programmes. Two CLMs have personally mentored a number of trainees, and several have given specific advice to individuals. One Trust has developed a leadership programme for new Consultants, with an explicit aim of creating a group of leaders to support the development of trainees.

Participate in the development of a Leadership Mentor network across the SW region

The Leadership mentors network was widely supported, though the meetings and through a WhatsApp group.

Develop and support a forum for local clinicians in the organisation to talk to trainees about leadership and reflect on their leadership and managerial roles.

This specific objective has been addressed mainly by working with existing groups and networks rather than proposing a new forum. The forums include Educational Supervisors Forums, training programmes, and specific events such as a 'leadership conversations workshop' One CLM led a grand round on leadership. One Trust has established a Junior Doctors' Forum with specific focus on leadership & management.

From these brief summaries it is clear that although there have been some commonalities, particularly in the specific areas of buddying and engagement in Quality Improvement, Clinical Leadership Mentors have engaged with their key responsibilities in a variety of ways. As highlighted above, variations in the way that the roles are enacted depend on a number of factors, including the Trust context including the size of the Trust and the number of trainees, existing structures, and the skills, interests, and networks of the individual Clinical Leadership Mentors. Although rarely mentioned in the reports, the availability of time is likely to be a key issue – some of the activities described, such as mentoring individuals, attending many inductions, and developing leadership training programmes will be time intensive, and so it is likely that some prioritisation between activities has been necessary.

The reporting of activities against the specific responsibilities underemphasises key relationship building and networking tasks that are important for a new role, especially where a Clinical Leadership Mentor was appointed late in the reported period, or is relatively new to the Trust. For Clinical Leadership Mentors who have additional roles such as Director of Medical Education this is less significant, but for others this was a key process in establishing the role. A number of CLMs have spent time in engaging with others, particularly the increasing number of Leadership Fellows and Chief Registrars, in order to bring together a loose coalition of medical leaders with a commitment to training.

In the surveys for educational supervisors, we asked for views on a number of the identified roles of CLMs, as discussed in their reports. The results are shown in the table below, with little to differentiate between the options, which all had consistently high support.

	% very useful or useful
To identify suitable leadership projects for trainees	93%
To identify suitable leadership roles for trainees	95%
To set up a system for trainees to shadow various leaders and managers	93%
Highlight leadership opportunities at trainees' induction	92%
Support the development of leadership opportunities for trainees	96%
Support trainees' representation at Senior Team meetings.	92%
Develop fora for local clinicians to talk to trainees about leadership	90%

The effectiveness of activities in context

Perhaps the clearest theme in the data is variation, and this makes any evaluation of specific activities difficult, in addition to the general difficulties of evaluating leadership development activities. Variation is reported between:

- Specialty contexts
- Junior trainees and senior trainees
- Trainees with an interest in leadership and management, and those without
- Trainees whose placements are longer and those that are shorter
- Trusts that are more engaging with trainee medical staff, and those who are less engaging
- Trainees who prefer leadership development to be embedded within the training programme and those who value learning across specialties or professions

There is very little evidence from the evaluation, or generally in the leadership literature about which activities are more effective than others, which was discussed in the Geerts et al (2020) review referred to above. There is in the education literature a wealth of theory and evidence about adult learning, which is reflected in the medical education processes, particularly in the balance between learning activities, where the 70:20:10 rule is often considered appropriate – that is 70% experiential learning, 20% exposure, and 10% formal learning.

The recent regulatory changes will embed leadership and other generic skills more firmly within the medical education context, and as one Education Supervisor said, being a good educator requires good leadership. Leadership development, like learning medical practice is a long process, where educational interventions vary, and a similar approach for leadership development is likely to be appropriate, not looking for evidence for specific interventions but providing a plurality of opportunities within a supportive context. A possible difference between leadership learning and the general medical curriculum is that leaders outside the profession could play an effective role.

Recommendations and issues for further exploration

The recommendations and issues for further exploration were discussed with Leadership Mentors, and their feedback, as well as the evaluation has identified a number of areas for consideration.

Firstly, specific recommendations on the Clinical Leadership Mentors scheme:

- The Clinical Leadership Mentors have contributed to developing leadership in trainees, although in different ways. Activities against the specific duties in job descriptions have varied. Although this is a formative evaluation, there does seem to be evidence to support the continuation, and development of the role, with support from trainees, educational supervisors, and Trust Managers.
- The role of Clinical Leadership Mentors might be less specified, with fewer identified specific responsibilities. Instead the purpose of the role should be emphasised in Job Descriptions, with autonomy to develop the role locally.
- The Clinical Leadership Mentors group has been highly valued, although the time commitment is noted – a day's meeting is equivalent to one month's remuneration of CLM time. Clinical Leadership Mentors might review how they work together to share good practice. The greater use of case studies and specific examples of activity may be appropriate. For some activities that are common across Trusts, for example motoring or shadowing, a loose framework to structure activities and reflection might be helpful.

Secondly, issues for further consideration:

- The survey was used in 8 Trusts, and remains available to Clinical Leadership Mentors if they want to use it.
- Understanding the specific issues that influence the organisational context for medical training seems like a priority area for Clinical Leadership Mentors. The variation between Trusts in the environment for leadership development was noted by 86% of trainees, and while there will always be variation, this finding suggests scope for sharing of good practice, and improvements.
- Connections between the wellbeing agenda, recruitment and retention, and the environment for leadership development were made in the evaluation, and this is also an area which may benefit from additional enquiry, and the engagement of senior Trust leaders. Developing this connection may encourage Trusts to increase the resources available to the Clinical Leadership mentor role.
- The interface of the CLM role with Leadership Fellows, Chief Registrars, and others trainees with a specific leadership interest and/or role is an area that may be developed. This may have benefits within individual Trusts, but may also widen the community of colleagues working to encourage leadership development for trainees. Such a network might also include trainee managers.
- The GMC annual training survey doesn't address issues of the leadership development activity that is available to trainees directly. This may change with the revised curricula, but if not some indicators for assessing leadership development experiences might be taken forward locally.
- There may be scope for innovative approaches to support the leadership development of trainees, particularly through the involvement of other trainees in mentoring more junior trainees, and the greater engagement of senior clinicians, particularly those close to or after retirement.
- The various different models of leadership available, and the supporting resources could be clarified. There are publications available (such as the Leadership Conversations document from the Leadership Academy) as well as regulatory documents such as the Generic Professional Capabilities Framework. The range of documentation available though, does also bring with it a complexity, and some simpler guidance on what learning might be appropriate for different levels of training may be helpful.
- The high percentage of trainees engaging in Quality Improvement is very encouraging, but other forms of leadership work and learning might also be encouraged in medical curricula and annual assessment.

References

The Academy of Medical Royal Colleges and GMC (2017) *Generic professional capabilities: guidance on implementation for colleges and faculties*

Aggarwal, R. and Swanwick, T. (2015) Clinical leadership development in postgraduate medical education and training: policy, strategy, and delivery in the UK National Health Service, *Journal of Healthcare Leadership*, Vol. 7, pp. 109-122.

Cleland, J., Prescott, G., Walker, K., Johnston, P. and Kumwenda, B. (2019), Are there differences between those doctors who apply for a training post in Foundation Year 2 and those who take time out of the training pathway? A UK multicohort study, *BMJ Open*, Vol. 9, No. 11, pp. e032021

Geerts, J.M., Goodall, A.H. and Agius, S. (2020), Evidence-based leadership development for physicians: A systematic literature review *Social Science & Medicine*, Vol. 246, pp. 112709.

General Medical Council (2017) *Generic Professional Capabilities*.

General Medical Council (2019). *The state of medical education and practice in the UK. 2019*

Gilbert, A., Hockey, P., Vaithianathan, R., Curzen, N., Lees, P. (2012) Perceptions of junior doctors in the NHS about their training: result of a regional questionnaire. *BMJ Quality and Safety*, 21 234-238.

Gordon, L.J., Rees, C.E., Ker, J.S. and Cleland, J. (2015), Leadership and followership in the healthcare workplace: exploring medical trainees' experiences through narrative inquiry, *BMJ Open*, Vol. 5, No. 12, pp. e008898

Gordon, L., Jindal-Snape, D., Morrison, J., Muldoon, J., Needham, G., Siebert, S. and Rees, C. (2017), Multiple and multidimensional transitions from trainee to trained doctor: a qualitative longitudinal study in the UK, *BMJ open*, Vol. 7, No. 11, pp. e018583.

Greenaway D (2013). *Shape of Training. Securing the future of excellent patient care*. Shape of Training Review.

Hall, L.H., Johnson, J., Watt, I., Tsipa, A. and O'Connor, D.B. (2016), Healthcare Staff Wellbeing, Burnout, and Patient Safety: A Systematic Review, *PloS one*, Vol. 11, No. 7, pp. e0159015

Health Education England (2017) *Leadership development for doctors in postgraduate medical training*.

Health Education England (2018) *Enhancing the leadership development offer in postgraduate medical training, Local implementation plans 2018/2019*.

Hodkinson, A., Riley, R. and Esmail, A. (2018), Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction: A Systematic Review and Meta-analysis, *JAMA Internal Medicine*, Vol. 178, No. 10, pp. 1317-1331

Ibrahim, J.E., Jeffcott, S., Davis, M. and Chadwick, L. (2013), Recognizing junior doctors' potential contribution to patient safety and health care quality, *Journal of Health Organisation and Management*, vol. 27, no. 2, pp. 273-286.

Kinman, G. and Teoh, K. (2018), *What could make a difference to the mental health of UK doctors? A review of the research evidence* Society of Occupational Medicine & The Louise Tebboth Foundation.

Mendis, D. and Paton, C. (2014), Perceptions of clinical leadership amongst West Midlands registrars, *International Journal of Leadership in Public Services*, Vol. 10, No. 2, pp. 108-124.

Moen, C., Brown, J. and Kaehne, A. (2018), Exploration of 'perception of self' as medical leader: does perception of self require a paradigm shift from clinician to clinical leader?, *BMJ Leader*, Vol. 2, No. 3, pp. 103-109

Scanlan, G.M., Cleland, J., Johnston, P., Walker, K., Krucien, N. and Skåtun, D. (2018), What factors are critical to attracting NHS foundation doctors into specialty or core training? A discrete choice experiment. *BMJ Open*, Vol. 8, No. 3, pp. e019911.

Ward, E. Junior doctor engagement: what is it, why does it matter and what the workplace can do to improve it, *BMJ Leader*, Vol. 3, No. 2, pp. 62-64.

Wathes R, Spurgeon P (2016) *Junior doctor engagement: Investing in the future*. Faculty of Medical Leadership and Management.

West M and Coia, D. (2019) *Caring for doctors, caring for patients: how to transform UK healthcare environments to support doctors and medical students to care for patients*. General Medical Council.