



**Improving leadership and
management training and
assessment for doctors in
postgraduate training**

Summary Report

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Leadership and Management

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Introduction

This project involved a programme of work to develop practical, innovative and evidence-based guidance on delivering leadership development and assessing medical trainees' knowledge, skills and behaviours in leadership across the UK.

The need for the project arose because of the increasing recognition that leadership is an important factor in the delivery of safe and effective healthcare and contributes towards the overall culture and climate of health provider organisations. There is growing activity in leadership development for doctors in training, but this is inconsistent, of variable quality and rarely underpinned by evidence. In short, the will may be there, but informed guidance is not. Therefore, the aims of this project were to provide:

- A review of the current state of practice informed by the research literature and the experiences and views of those who organise, provide and receive leadership development and assessment;
- Guidance on how to help doctors develop their leadership skills and assess leadership competence in doctors in training;
- A programme to equip the existing clinical educator and trainer workforce to add leadership development skills to their armamentarium.

As a result, the team hope to increase awareness amongst the medical education and training community of:

- The importance of medical leadership and management and the evidence base that underpins this;
- Contemporary approaches to leadership and management development and assessment which can be practically integrated into training opportunities in workplace and formal settings;
- A cadre of consultants, GPs, and senior trainees with awareness of leadership development and assessment methods and with the skills to develop junior colleagues.

The project involved stakeholders from across the UK and the project was managed by FMLM in collaboration with academics and practitioners. See Appendix A for further details.

Literature Review

The literature review aimed to identify practical, innovative, and evidence-based guidance on delivering and assessing leadership development for medical trainees across the UK. The current review updated a comprehensive systematic review of leadership development for medical professionals (Lyons et al., 2020). This review provides a firm foundation in published best practice in medical leadership development.

To supplement the systematic review, the project team completed a review of leadership development practices outside healthcare where there has been more comprehensive research into the evidence base. This review provided key insights regarding the design, delivery, and assessment of leadership development in programmes and in the workplace. The project team has also searched the grey literature for additional examples of good and emerging practice as many initiatives are not published in the peer-reviewed literature.

The review identified leadership development methods, core content, learning theories that support effective leadership development, as well as core policy and strategy documents that concern medical leadership development. There is clear support in the literature for experiential learning approaches (i.e., learning through 'doing' and reflection) and for developmental relationships (e.g., mentor-mentee or longer-term supervision focussing on the learner's personal and professional development and growth). This underlies a growing movement towards supporting effective workplace leadership development, rather than the historical approach of relying primarily on externally provided leadership development programmes.

The literature review is available as a separate document on the project website.

Consultation

Through surveys and interviews, the project team captured the views and experiences of doctors in training, those responsible for their development, those responsible for the design and commissioning of leadership development, and those with extensive experience in medical leadership. Surveys and interviews drew from existing evidence around leadership development and were developed in collaboration with various stakeholders, including doctors in training. Surveys were piloted and refined prior to final dissemination.

1. Doctors in training	To capture the lived experience of leadership development and assessment 'on the ground', both in terms of formal training or education programmes and in the workplace. The aim of these surveys was to identify good practice and gaps in leadership development.
2. Trainers/supervisors	
Educators who are not currently involved in leadership development	This survey (carried out in partnership with the Academy of Medical Educators) was designed to gather the perspectives of educators who are currently not directly or formally involved in leadership development for doctors in training. Through this survey and that aimed at experts, the project team has gathered information pertaining to identifying some of the 'threshold concepts' (key concepts or content for leadership development) and 'entrustable professional activities' (EPAs) which can be used to help design assessment activities for doctors in training.
4. Experts in leadership development.	A list of international experts was identified by the project team and invited to respond via a survey or short online interview.

The detailed results from the surveys and interviews are available as separate documents on the project website.

The project team also collaborated with the GMC Education team on analysing the National Training Survey (NTS) in terms of what this tells us about leadership development and specifically the needs and gaps. The findings from this analysis corroborated those of our study, in that many respondents felt that their leadership development was minimal and often tokenistic or only available to a select few. Working with the GMC Education team enabled an exchange of ideas and views, in particular how the leadership capabilities enshrined in the Generic Professional Capabilities Framework could best be recorded and assessed. The updated version of Good Medical Practice was also informed by these collaborations, (see <https://www.gmc-uk.org/professional-standards/good-medical-practice-2024>).

The next sections summarise findings from the literature, surveys, and interviews in terms of learning, teaching and assessment in both formal courses or programmes and workplace leadership development. Consensus, examples of best practice, and any divergent views are reported.

Formal courses and programmes

What the literature says

A systematic review (Lyons et al. 2020) found limited consensus in the peer-reviewed literature on best practices in design, content, and assessment of medical leadership development and noted that this was unsurprising given the wide range of definitions of leadership which persist. Most leadership development efforts were focused in one organisation only (61%) (single hospital, hospital department or university). Just under a quarter (23%) of leadership development was delivered across more than one healthcare setting, although a further 15% of studies were conducted across a specialty training programme outside healthcare centres. Programmes ranged in length from less than a day (five programmes, 4%) to a maximum of four years. The median length was six months, with only 18 (15%) of leadership development interventions being longer than one year.

As with many educational interventions, much of the peer-reviewed literature on formal courses in leadership for health professionals report on self-reported 'satisfaction' evaluations from participants, with few reporting in higher level impact such as organisational change or improvements in health outcomes. In the Lyons et al (2020) systematic review, most studies which reported organisational outcomes associated with their leadership development efforts included small group work (71%) alongside project work (68%) and large-group lectures (62%). Many also used individual or group mentoring (48%). Also noted was a higher prevalence of project work in programmes that reported organisational outcomes than in those that did not (68% vs 33%). There was also higher prevalence of mentoring (47% vs 30%). There was limited consistency of educational content across the included programmes. The only content area reported in more than half of the programmes was leadership theory (65% of programmes). Other content areas reported included performance management (44%), self-management (41%), change management (39%), communication (36%), teamwork (33%), quality improvement (30%), healthcare policy (27%), healthcare finance (26%), and leadership behaviours (20%). There were no noticeable differences in content in programmes that did or did not report organisational level outcomes.

An emerging consensus on leadership development and assessment

A recent review of the peer-reviewed and grey literature corroborates the findings above. In summary the project team note an emerging consensus around the following:

- Some internal faculty as well as external facilitators are required;
- Active/experiential methods of learning (e.g., service improvement projects, small group work etc) are most effective (Geerts et al 2020);
- Learning needs to be connected to real life practice in the workplace, geared around equipping doctors with the knowledge, skills, broad-ranging flexible behaviours, and confidence to lead and manage in a range of situations and complexity (Baird et al 2018);
- Participants value mentoring and coaching which helps support their leadership development and workplace supervision for practical, real-life projects (Centre for Creative Leadership 2021);
- Methods that facilitate engagement and application of knowledge to practice appear more important than specific content (above the threshold of relevance) which is reassuring for trainers who do not have leadership 'content' knowledge;
- Assessment is primarily through self-evaluation, reflection, workplace projects, observation and feedback;
- Formal leadership development, when completed by trainees, needs to be integrated with workplace learning and assessment: leadership development is a long-term process not an event.

Consensus and best practice on learning and teaching

Trainees and trainers who responded to the surveys both reported engagement in a variety of informal and formal leadership experiences. In terms of what had been most effective, trainees cited learning from mentors and more experienced leaders, as well as completing courses or programmes. For both the trainee and trainer survey, 7% had a formal leadership qualification and 38% said they had not completed any leadership development. For the educator survey, 81% indicated they had formal training in education/teaching; 15% had a formal leadership qualification e.g., MBA/MSc. Trainees desired more formal training opportunities, even just through one-day courses, and 38% said they were missing a formal training aspect in their development.

There is good consensus across all respondents on what should be provided via formal courses in terms of content, with a strong emphasis on developing leadership skills relating to self and others, understanding how organisations and systems work, and putting theory into practice with real life examples. Although all doctors in training are required to undertake audits and quality improvement projects, many noted that opportunities to learn from these in terms of their actual leadership development were often missed.

There is also strong consensus on the approaches that should be taken to facilitate learning: a focus on reflection; theory tied to practice; small group activities, discussion, and debate; interactive learning; blended and hybrid learning to facilitate access and flexibility; and a programmatic approach recognising that leadership development is longitudinal.

Compared to trainees, more trainers spoke of the importance of understanding themselves as leaders and recognised that there were many different leadership styles, all valuable. Several also discussed the importance of integrity and inclusivity. There also seemed to be a generally deeper understanding that cultural and practice-based change (e.g., implementing workplace leadership development) takes time, and that it is vital to get all team members on board for any changes.

Consensus and best practice on assessment

For award bearing programmes, there is a consistent view from all on the types and purpose of assessments, including the need for a range of written, practical, behavioural, summative and formative methods. In both formal education/training as well as workplace learning, opportunities for practice and feedback, guided reflection, and theories and activities being made relevant to the workplace and the individuals' own context and stage of development are all deemed essential.

Workplace leadership development

What the literature says

The peer-reviewed literature on medical leadership development is scarce in relation to workplace development and assessment. However, as reported above, there is consensus from peer-reviewed and grey literature that the focus needs to be on equipping trainers (and trainees) for high quality workplace leadership development closely tied to learning goals at each stage of career.

Assessment is a priority for both guiding trainees' learning and for quality assurance. While self-assessment can support learning through reflection, if medical leadership development (as part of the assessment of professionalism) is to be improved across the UK it is important that more robust forms of assessment are introduced (Hodges et al 2019).

Most leadership development studies in the Lyons et al 2020 systematic review (85%) used self-assessment questionnaires as their main means of assessment, supplemented in some cases (42%) by interviews, observations, project evaluations, tests, simulation assessments, or evaluating impact on organisational metrics. As with the assessment of all aspects of professional behaviours, workplace assessment should be programmatic, longitudinal, and developmental, should include observation and encourage and facilitate learning and reflection through timely and constructive feedback. The workplace is the most authentic place to assess competences in practice, therefore assessment needs to be directly tied into work-based practice (Hodges et al 2019).

Assessors should comprise seniors, other health workers, peers and near peers, and patients. Assessment should focus on practical examples where leadership, management and followership are expected and include assessment in practical, clinical, and non-clinical situations (Kumar et al 2020).

Ideally, assessment should be built into professional capabilities because leadership behaviours and skills form part of the overall assessment of professionalism (McKimm & O'Sullivan, 2011; ten Cate et al 2016). Because of the close association between medical leadership and professionalism, and a general movement in medical education towards the use of entrustable professional activities (EPAs), this highlighted the need for further review in this area. Review of the grey literature indicates that work is emerging from some Colleges (e.g., the Royal College of Anaesthetists) on introducing EPAs for clinical competencies; this also forms part of the direction of travel for the GMC in developing professional capabilities.

Consensus and best practice on learning and teaching

The workplace is defined by all respondents as the place where doctors should primarily learn to develop their leadership capabilities in both clinical and managerial situations. Leadership activities, learning and feedback should be embedded into all aspects of clinical work and long-term experiential development is the most appropriate way for doctors to acquire their knowledge and skills.

Learning should be scaffolded according to stage of training and individual development, supported by consistent coaching and mentoring. Examples of learning approaches include blended learning; shadowing junior/senior leaders; small group discussions; case work/studies, mixing specialities; embedding opportunities for reflective practice, and centralised e-learning to cover theoretical basics and philosophy supplemented with local workshops (blended learning with options improves accessibility).

From the survey responses, trainees considered the most **valuable informal experiences as those opportunities where they were given the chance to 'take charge'**, for example by chairing meetings, leading on quality improvement projects, making clinical decisions, clinical handovers, leading ward rounds or theatre lists, guiding medical students, or leading small teams. These are the **entrustable professional activities** previously mentioned. Projects are seen by the experts as central so doctors can get their teeth into something real and apply theory to practice. However, as noted above, supervisors need to support their trainees in signposting leadership development opportunities and enabling them to learn more from the projects than just about applying QI techniques.

Limiting factors for trainee development were time, access to opportunities, and supervisor 'buy-in'. Supervisors are seen by the 'experts' as key to the development experience, however role modelling and support from the senior leadership team is vital to set a culture where leadership is valued and nurtured at all levels. Supervisors must be willing, engaging role models who understand leadership development and must offer support and be able to identify opportunities for supervisees to engage in 'real life' practice. When listing what **key situations** (EPAs) a trainee should be able to manage by the end of their training, these generally were focused on leading MDT meetings, leading and booking ward rounds, managing rotas, being able to listen to and support others, dealing with complaints, managing day-to-day challenges, managing their own workload independently, mentoring others, giving presentations, and leading educational activities.

Consensus and best practice on assessment

Respondents from the 'expert' interviews felt strongly that leadership development (in common with most personal and professional development) should not rely on high-stakes assessment events (such as examinations) but should be programmatic. However, summative assessment is seen as more problematic and difficult than formative, developmental assessment.

Whereas some respondents said there should be no specific assessment of leadership and that it should be integrated with other workplace assessments, most said that leadership should be assessed as a discrete topic, for example through observation, multisource feedback, workplace assessments, portfolios, and reflection (or EPAs).

Only 26% of trainees reported never having been assessed on their leadership behaviours, abilities or competences. The others were usually assessed through workplace feedback or in their Annual Review of Competencies Progression (ARCP). A quarter of trainees have never been assessed specifically on leadership abilities. However, 67% of trainees agreed that formal assessment of leadership is needed. In broad agreement, >80% of trainers reported assessing trainees, mostly using workplace feedback (80%) and ARCP (30%). Those that did not assess said they did not because it is not required or supported clearly enough. Most trainers indicated that they knew when a doctor in training could be trusted to lead and manage clinical/other situations through **observation and experience**, as well as feedback.

Leadership and management capabilities can be evidenced through leadership of specific clinical situations such as a crisis, trauma, ward round or discharge, or contextual assessments such as emergency medicine doctors being observed leading the department. Leadership situations and expectations will be different across the specialties and different contexts, so will need to be tailored accordingly.

When asked to identify how they decide when doctors in training can be trusted to lead and manage clinical and other situations, most trainers suggested that this was a general feeling built through observing trainees undertaking leadership activities either directly or indirectly. There was a general consensus from the 'experts' that supervisors were much more confident in and familiar with assessing leadership, management and followership in the clinical context than in management situations. While this requirement to observe, confer some independence and slowly entrust more leadership to trainees was broadly suggested through the trainers, the medical educators were more specific about what might constitute EPAs (*entrustable professional activities*) in leadership and management of non-clinical situations.

Examples of EPAs in non-clinical situations:

- *“Chairing a meeting*
- *Attending and participating in a child protection strategy meeting (paediatrics)*
- *Chairing a patient multidisciplinary team meeting*
- *Learning debriefing skills*
- *Running simulation sessions*
- *Completing an internal investigation on an adverse incident*
- *Contributing to clinical governance meetings” (Medical Educator)*

Testing out views on the emerging concept of EPAs found strong support for the development of EPAs relating to leadership and management from both the educators and the 'experts'.

Issues, challenges, suggested solutions, and strategies

Access to leadership development is often inequitable, with huge variability across the UK and in different specialities. Organisations and training programmes must pay more attention to equity and inclusivity in terms of access, targeting and language to capitalise on the benefits to patients that good leadership brings. Several trainees also suggested that existing opportunities for leadership development in the workplace are often not taken advantage of.

Specifically, trainers and trainees said the following were missing from leadership development for trainees:

- **formal training** on leadership specifically;
- a **recognition of the importance** of leadership (i.e., supervisor buy-in);
- **time** to pursue training, especially as trainees are often focused purely on clinical training;
- **opportunities** to put training and learning into practice.

There was a general feeling from trainees that trainers do not have the capacity or experience to support trainee leadership development, and that this results in lost opportunities for learning. Lack of time was cited by all respondents as the most common barrier to providing and obtaining coaching, learning, or mentoring due to clinical workload, crowded curricula, or unsupportive managers. **Senior leadership therefore needs to support leadership training and development as a core activity, for both supervisors/trainers and trainees.**

Many respondents mentioned the lack of educators available who are clinically trained, have a theoretical knowledge of leadership and management as well as significant leadership experience. Whilst finding such a combination in supervisors might seem quite unrealistic for all trainees, there are many ways that supervisors can be supported to provide meaningful leadership development for doctors in training.

The practicalities of 'learning leadership' in busy clinical environments for trainees was highlighted, therefore trainees need guidance on how to spot leadership and development opportunities and obtain feedback. A strong theme that emerged throughout the 'expert' interviews was the need to develop a shared '**language of leadership**', to not shy away from identifying situations where leadership is needed and to learn to use the '*Leadership*' word in everyday conversation. This needs to be explored further in terms of raising awareness of the importance of using the language of leadership and management in clinical as well as management situations. This means using some management terminology as well as identifying situations and activities as being leadership, management, or followership.

A strong emerging theme from all the questionnaires was that there are too many expectations and frameworks which are not aligned with one another, for example: FMLM Leadership and management standards for medical professionals; GMC Generic Professional Capabilities Framework; Medical Royal College curricula; and the Healthcare Leadership Model. Some respondents suggested that a '*national indicative curriculum*' would be helpful, similar to the Canadian model or linking existing standards and frameworks together with examples of how to facilitate learning, give feedback and embed leadership development into formal workplace assessments.

Opportunities for meaningful assessments of leadership and management abilities are not embedded in formal assessments of training, therefore not deemed as important as 'clinical' expertise. However, doctors need to be prepared for and assessed in the management of challenging situations in a range of contexts, not just clinical situations.

Specific challenges were described by all respondents around workplace learning and assessment, at all levels, including in the healthcare system which tends to provide training and experiences in a 'just in time' manner and does not emphasise succession planning, except for more senior staff in organisations. This is exacerbated by training programme structures which require trainees to move from rotation to rotation, and to different organisations, so the department or organisation does not see the benefits of its investment and trainees themselves are unable to lead long term quality or service improvement projects. However, there are examples, such as the GPC Hub set up by anaesthetists at Guys and St Thomas' NHS Trust that use existing opportunities within clinical training programmes to engage trainees in leadership development and support them to lead on projects within their trusts and make sustainable changes within their own organisation (Millar et al, 2023)

Integrating leadership into everyone's work

A change in culture is needed from where leadership is considered an 'extra' or only relevant to 'managers' or senior clinicians to something that is integrated in every aspect of training:

- start leadership development early and make it a core skill set, not an add on or just for senior people
- tailor leadership development to level and areas of practice
- build leadership development into schedules as an expectation, rather than an 'add-on'
- ensure that trainees have enough time to focus on long-term leadership development; provide more mentoring opportunities
- development needs to be centred around longitudinal personal and professional development in the workplace, supplemented by more formal training, not the other way round.

Supporting trainers and educators

What the literature says

No peer-reviewed literature was found in relation to training faculty to deliver formal medical leadership development programmes or support leadership development of doctors in training in the workplace. Doctors mainly learn to teach leadership formally through having been on a leadership development programme (such as a masters or MBA) themselves. Limited examples can be found in the grey literature from Canada, Australia and the UK that report on projects or initiatives designed to prepare and develop faculty for supporting leadership development. Most of these projects aimed to provide training to clinical educators or supervisors to support trainees in the workplace. The *'Learning to lead'* programme designed and delivered in partnership by Health Education Thames Valley, Health Education Wessex and NHS Thames Valley and Wessex Leadership Academy is one example. This programme focuses on helping supervisors provide leadership development through a combination of signposting leadership situations or experiences, a coaching approach, and structured professional conversations.

Report from surveys and interviews on 'teaching leadership'

Most trainers cited personal experience and observation of other leaders as where they learned to teach leadership; 82% of trainers said that training in 'teaching leadership' would be helpful. Only 39% of trainers used leadership and management models in their training; 38% were unsure, indicating the need for more development in this area. Trainers would welcome ideas for workplace learning opportunities (68%), followed by sample lectures (57%) and a train-the-trainer programme (52%).

Many trainees specifically reported that they would like to be supported more through formal learning and, although feeling like they have not been prepared for leadership activities, that training in 'teaching leadership' would be helpful. Trainers also emphasised the need for more leadership development education for trainers themselves.

For both the trainee and trainer survey collectively, 7% had a formal leadership qualification and 38% said they had not completed any leadership development. For the educator survey, 81% indicated they had formal training in education/teaching (e.g., postgraduate certification, master's degree); 15% had a formal leadership qualification e.g., MBA/MSc.

It is unsurprising then that many educational and clinical supervisors often feel like 'imposters' when asked to 'teach leadership' or support trainees in their leadership journey and did not see themselves as credible leaders. Trained and confident supervisor facilitators are therefore needed to support self-development and team working.

Alongside wider system changes, programmes for supervisors would provide one means of supporting supervisors to, in turn, support their trainees in leadership and management.

Respondents suggested such a programme should include:

- Some theoretical concepts and management models, linked to day-to-day practice
- Case studies and scenario examples
- Training in facilitating interactive and self-development activities and dealing with issues
- Training in how to teach/facilitate learning, give feedback and assess leadership both 'on the run' in the workplace and in more formal classroom settings.

Finally, it should not be assumed that 'experts' in leadership development do not require further development themselves. Both the educators and the 'expert' interviewees mentioned the lack of training, development and networking opportunities for them as 'leaders of leadership development' and their struggles to keep abreast of the massive literature and remain contemporary and credible. Opportunities for networking and developing practice would be welcomed.

Conclusions and next steps

The literature review, survey, and interview findings have been used to inform the development of the guidance which is available on the FMLM website. The guidance includes a range of written advice, podcasts, short videos, references, and links to useful materials. Below the project team outline a response to some of the issues raised in the work to date and planned approach for the next phase of the project.

Formal courses/programmes vs workplace development

The project team appreciates there is value in formal courses and programmes for doctors in training and that access could be improved across the country. FMLM is currently working on identifying core aspects of a development framework that will guide and inform trainers and trainees how they may build their leadership.

There are obvious challenges in delivering programmes at scale that consider the nuances of specialty training programmes and prior experience of individuals involved. The feedback suggests that leadership development should primarily take place in the workplace and the research evidence supports the view that this is where it is most effective. Therefore, although the guidance focuses on workplace leadership development, there is a section signposting to examples of formal programmes and opportunities available; this list is not exhaustive.

To guide the quality of programmes, FMLM provides a process for [accrediting programmes](#) that meet the [Leadership and management standards for medical professionals](#) and expectations of how effective programmes should be designed and delivered. Feedback from the surveys conducted in this project provide suggestions for content and approaches for delivery.

Theory vs practice

In deciding to focus on the workplace as the primary setting for leadership development, the emphasis is on entrustable professional activities (EPAs) and approaches to facilitate learning. Examples of leadership and management EPAs are provided in this summary and those responsible for curricula and delivery of training are encouraged to identify EPAs appropriate to their setting or specialty. This will allow trainees to identify opportunities to practice leadership, and supervisors and trainers will have access to tangible, effective ways to support trainee development within the clinical environment and management settings.

It is recommended that programmes be weighted towards practical approaches but include an element of theory to support the learning and confidence of participants. This might include structured reflections to help trainees interpret the impact of value of the variable experiences and guidance for trainers on the potential value/themes that are likely to surface with each EPA.

Who needs support?

The surveys and interviews stressed the importance of supervisor 'buy-in', 'expertise' and role modelling as well as senior leadership role support. The project team also heard that supervisors and trainers felt underprepared to support the leadership development of trainees, having not experienced such development themselves.

The project initially aimed to develop a generic, national 'Train the Trainers' Programme to meet these needs. However, through the survey findings and discussions with the 'experts' and other stakeholders, it became apparent that, whilst a programme could be developed fairly straightforwardly, this would only benefit a small number of trainers unless it formed part of a national development programme, which would be financially prohibitive. It was agreed therefore to develop a series of resources (information and guidance, podcasts, webinars and signposts to useful resources) that would be hosted on the FMLM website as an open access resource. This would enable the project reach to be much wider and therefore support the development of a much greater number of trainers.

The project team would also encourage any supervisor, trainer, or educator to access leadership development as part of their professional development. FMLM Applied can design and deliver train the trainer programmes for specialties, practices, organisations, and systems, appropriate to local context and needs.

Assessment

Further exploration is needed with regards to appropriate assessment methods for both clinical and other contexts. The guidance includes a section on assessment and a podcast with experts who provide examples of how leadership and management can be assessed in an integrated way with existing workplace assessments and formal examinations.

Other issues

Other issues arose which are outside the scope of this project. For example, the existence of multiple frameworks and models creating confusion. FMLM has updated the mapping of its standards to other frameworks and models but the project team will take the GMC Generic Professional Capabilities as the guiding framework for the next stage of work given this articulates expectations of all trainees and is integrated into college curricula.

Another issue identified was around the timing of leadership development, rotations, and inclusion in curricula. While these are also beyond the scope of this project, it is hoped through the guidance that those who are most closely involved in trainee development will feel better equipped to provide opportunities and feedback throughout their trainees' careers without the need for significant changes in training patterns or curricula.

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Appendices

Appendix A

Project Management

The project is managed by a team from FMLM and other academics and practitioners. This team reports to and is informed by the Steering Group (see below). The team comprises:

- Prof Judy McKimm, Chester Medical School
- Prof Jacky Hayden, Chair, Academy of Medical Educators
- Dr Oscar Lyons, Oxford University
- Ms Chloe Mills, PhD Candidate, Swansea University
- Mr Peter Lees, former Chief Executive, FMLM
- Ms Kirsten Armit, Director of Research, FMLM.

Stakeholder Engagement

Many stakeholders with an interest in postgraduate medical education and training across the UK were involved in the project:

- The steering group included representatives from postgraduate medical education institutions across all four nations as well as the UK regulator:
 - Prof Sheona Macleod, Deputy Medical Director, Health Education England (HEE) and Chair of the Conference of Postgraduate Medical Education Deans (COPMeD)
 - Dr Ian Collings, Director of Medical Professional Support and Development, Health Education and Improvement Wales (HEIW)
 - Prof Alan Denison, Postgraduate Dean, NHS Education for Scotland
 - Dr Ian Steele, Postgraduate Medical Dean, Northern Ireland
 - Prof Colin Melville, Medical Director and Director of Education and Standards, General Medical Council (GMC)
 - Prof Sue Carr, Deputy Medical Director, General Medical Council (GMC)
 - Dr Patrick Cadigan, Trustee, Dinwoodie Charitable Company
 - Dr Elizabeth Hughes, Trustee, Dinwoodie Charitable Company.
- Thought leaders, educators, trainers, trainees from across primary and secondary care were consulted through interviews and questionnaires:
 - ‘Thought leaders’ – national and international academic and practitioner experts in leadership development from the UK, Canada, Australia, New Zealand, the US and Europe, their contribution comes via interviews and a survey, plus their written publications, including grey literature.
 - The GMC Education team that was carrying out a substantial body of work around leadership development and assessment as part of their work on developing Medical Professional Capabilities and review of the annual National Training Survey of doctors in training and their supervisors. The project team members are working closely with the team to avoid duplication and learn from one another.
 - Educators – in partnership with the Academy of Medical Educators.
 - Trainers – medical and non-medical trainers of postgraduate doctors.

- Trainees – the intended recipients of leadership development, who might also be engaged in supervision and development of their junior colleagues. This also includes doctors across the UK who are or have been involved in clinical leadership fellowships.
- Co-creation of guidance with educators, trainers, and trainees to ensure what is produced is relevant and practical for application in the workplace.